



SERVICE MANUAL

EXM Mobile 12



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WORLD HEADQUARTERS

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SMT Disclaimer

Due to the complex nature of the use of SMT installed components in Yorkville equipment, we highly caution all service technicians in attempting to repair or replace SMT factory installed components.

Many of these components may be glued prior to initial soldering.

Replacing SMT components requires expensive specialized de-soldering equipment and training.

Yorkville Sound will repair and replace defective SMT components to ensure proper quality assurance and installation is maintained.

Quality and Innovation Since 1963
Printed in Canada

IMPORTANT SAFETY INSTRUCTIONS



This lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

Ce symbole d'éclair avec tête de flèche dans un triangle équilatéral est prévu pour alerter l'utilisateur de la présence d'un «voltage dangereux» non-isolé à proximité de l'enceinte du produit qui pourrait être d'amplitude suffisante pour présenter un risque de choc électrique.

The DO NOT STACK symbol is intended to alert the user that the product shall not be vertically stacked because of the nature of the product.

La symbole NE PAS EMPILER est pour alerter l'utilisateur que le produit ne doit pas être empilé verticalement en raison de la nature du produit.



SEPARATE
COLLECTION
WEEE



CAUTION: HOT SURFACE
ATTENTION: SURFACE CHAUE



DO NOT
PUSH OR PULL



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Le point d'exclamation à l'intérieur d'un triangle équilatéral est prévu pour alerter l'utilisateur de la présence d'instructions importantes dans la littérature accompagnant l'appareil en ce qui concerne l'opération et la maintenance de cet appareil.

FOLLOW ALL INSTRUCTIONS

Instructions pertaining to a risk of fire, electric shock, or injury to a person

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK).

NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE

PERSONNEL. THIS DEVICE IS FOR INDOOR USE ONLY!

**INSTALLED BATTERY PACKS SHALL NOT BE EXPOSED TO EXCESSIVE HEAT
SUCH AS SUNSHINE, FIRE OR THE LIKE.**

SUIVEZ TOUTES LES INSTRUCTIONS

Instructions relatives au risque de feu, choc électrique, ou blessures aux personnes

AVIS: AFIN DE REDUIRE LES RISQUE DE CHOC ELECTRIQUE, N'ENLEVEZ PAS LE COUVERT (OU LE PANNEAU ARRIERE) NE CONTIENT AUCUNE PIECE REPARABLE PAR L'UTILISATEUR.

CONSULTEZ UN TECHNICIEN QUALIFIE POUR L'ENTRETIEN CE PRODUIT EST POUR L'USAGE À L'INTÉRIEUR SEULEMENT. LES PACKS BATTERIES INSTALLEÉS NE DOIVENT PAS ÊTRE EXPOSÉS À UNE CHALEUR EXCESSIVE TELLE QUE LE ENSOLEILLEMENT, LE FEU OU SIMILAIRES.

Read Instructions: The Owner's Manual should be read and understood before operation of your unit. Please, save these instructions for future reference and heed all warnings.

Clean only with dry cloth.

Packaging: Keep the box and packaging materials, in case the unit needs to be returned for service.

Warning: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. *Do not use this apparatus near water!*

Warning: When using electric products, basic precautions should always be followed, including the following:

Power Sources

Your unit should be connected to a power source only of the voltage specified in the owners manual or as marked on the unit. This unit has a polarized plug. Do not use with an extension cord or receptacle unless the plug can be fully inserted. Precautions should be taken so that the grounding scheme on the unit is not defeated. An apparatus with CLASS I construction shall be connected to a Mains socket outlet with a protective earthing connection. Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

Hazards

Do not place this product on an unstable cart, stand, tripod, bracket or table. The product may fall, causing serious personal injury and/or serious damage to the product. Use only with cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the product. Follow the manufacturer's instructions when installing the product and use mounting accessories recommended by the manufacturer. Only use attachments/accessories specified by the manufacturer. Note: Prolonged use of headphones at a high volume may cause health damage on your ears.

The apparatus should not be exposed to dripping or splashing water; no objects filled with liquids should be placed on the apparatus.

Terminals marked with the "lightning bolt" are hazardous live; the external wiring connected to these terminals require installation by an instructed person or the use of ready made leads or cords.

Ensure that proper ventilation is provided around the appliance. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

No naked flame sources, such as lighted candles, should be placed on the apparatus.

Power Cord

Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet. The AC supply cord should be routed so that it is unlikely that it will be damaged. Protect the power cord from being walked on or pinched particularly at plugs, if the AC supply cord is damaged DO NOT OPERATE THE UNIT. To completely disconnect this apparatus from the AC Mains, disconnect the power supply cord plug from the AC receptacle. The mains plug of the power supply cord shall remain readily operable.

Unplug this apparatus during lightning storms or when unused for long periods of time.

Service

The unit should be serviced only by qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped. Disconnect power before servicing!

IMPORTANT SAFETY INSTRUCTIONS



The Lightning Flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product enclosure that may be of sufficient magnitude to constitute a risk of shock to persons



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product

1. Read these instructions.

2. Keep these instructions.

3. Heed all warnings.

4. Follow all instructions.

5. Do not use this apparatus near water.

6. Clean only with dry cloth.

7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11. Only use attachments/accessories specified by the manufacturer.

12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.

14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING:

• To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture and objects filled with liquids, such as vases, should not be placed on this apparatus.

• To completely disconnect this apparatus from the ac mains, disconnect the power supply cord plug from the ac receptacle.

• The mains plug of the power supply cord or appliance coupler shall remain readily accessible.



Le symbole représentant un éclair avec une flèche à l'intérieur d'un triangle équilatéral est utilisé pour prévenir l'utilisateur de la présence d'une tension électrique dangereuse non isolée à l'intérieur de l'appareil. Cette tension est d'un niveau suffisamment élevé pour représenter un risque d'électrocution



Le symbole représentant un point d'exclamation à l'intérieur d'un triangle équilatéral, signale à l'utilisateur la présence d'instructions importantes relatives au fonctionnement et à l'entretien de l'appareil dans cette notice d'installation

1. Lisez ces instructions.

2. Conservez ces instructions.

3. Respectez tous les avertissements.

4. Suivez toutes les instructions.

5. N'utilisez pas l'appareil près de l'eau.

6. Nettoyez uniquement avec chiffon sec.

7. Ne bloquez pas les ouvertures de ventilation. Installez en suivant les instructions du fabricant.

8. Ne pas installer près des sources de chaleur telles que radiateurs, bouches de chaleur, four ou autres appareils (y compris les amplificateurs) produisant de la chaleur.

9. N'annulez pas l'objectif sécurité de la fiche polarisée ou de la tige de mise à la terre. Une fiche polarisée possède deux lames avec une plus grande que l'autre. Une prise avec mise à la terre possède deux lames et une troisième tige. La lame large ou la troisième tige sont fournies pour votre sécurité. Si la fiche n'entre pas dans votre prise, consultez un électricien pour remplacer la prise obsolète.

10. Protéger le cordon d'alimentation des piétinements ou pincements en particulier près des fiches, des prises de courant et au point de sortie de l'appareil.

11. Utilisez uniquement les accessoires spécifiés par le fabricant.

12. Utilisez uniquement avec un chariot, stand, trépied ou une table spécifiée par le fabricant, ou vendus avec l'appareil.

13. Débranchez l'appareil durant un orage ou lorsqu'il reste inutilisé pendant de longues périodes de temps.

14. Confiez toute réparation à un technicien qualifié. Une réparation est nécessaire lorsque l'appareil a été endommagé de quelque façon que ce soit; comme lorsque le cordon d'alimentation ou la fiche est endommagé, lorsque le liquide a été renversé ou des objets sont tombés à l'intérieur, lorsque l'appareil a été exposé à la pluie ou l'humidité, ne fonctionne pas normalement, ou est tombé.

AVERTISSEMENT:

• Pour réduire les risques d'incendie ou de choc électrique, ne pas exposer cet appareil à la pluie ou à l'humidité et ne placez pas d'objets contenant des liquides, tels que des vases, sur l'appareil.

• Pour isoler totalement cet appareil de l'alimentation secteur, débranchez totalement son cordon d'alimentation du réceptacle CA.

• La prise du cordon d'alimentation ou du prolongateur, si vous en utilisez un comme dispositif de débranchement, doit rester facilement accessible.



CAUTION

TO PREVENT ELECTRIC SHOCK HAZARD,
DO NOT CONNECT TO MAINS POWER SUPPLY
WHILE GRILLE IS REMOVED.



AVIS

POUR PRÉVENIR LES RISQUES D'ÉLECTROCUSSION,
NE PAS RACCORDER A L'ALIMENTATION ÉLECTRIQUE ALORS
QUE LA GRILLE EST RETIRÉE.

NO USER SERVICEABLE PARTS INSIDE.
NE CONTIENT AUCUNE PIECE
REPARABLE PAR L'UTILISATEUR.



To LINK, Connect the MAIN Output to the MAIN Input of another powered speaker cabinet

THIS UNIT CAN
BE OPERATED
WHILE CHARGING!

Green = Fully Charged
Red = Charging

Ensure your unit is charged for
4-5 hours before battery operation!

Bluetooth™

EXM Mobile12

CAUTION • AVIS



RISK OF ELECTRIC SHOCK
DO NOT OPEN
RISQUE DE CHOC ELECTRIQUE
NE PAS OUVRIR



Contains Transmitter Module FCC ID: A8TBM20SPKXYNBZ

Contains Transmitter Module ID: 12246A-BM20SPKS1

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

EXMMOBILE12

A-Z1749 / 1v5

SERIAL NUMBER

100-240 V~
50-60 Hz
100 VA



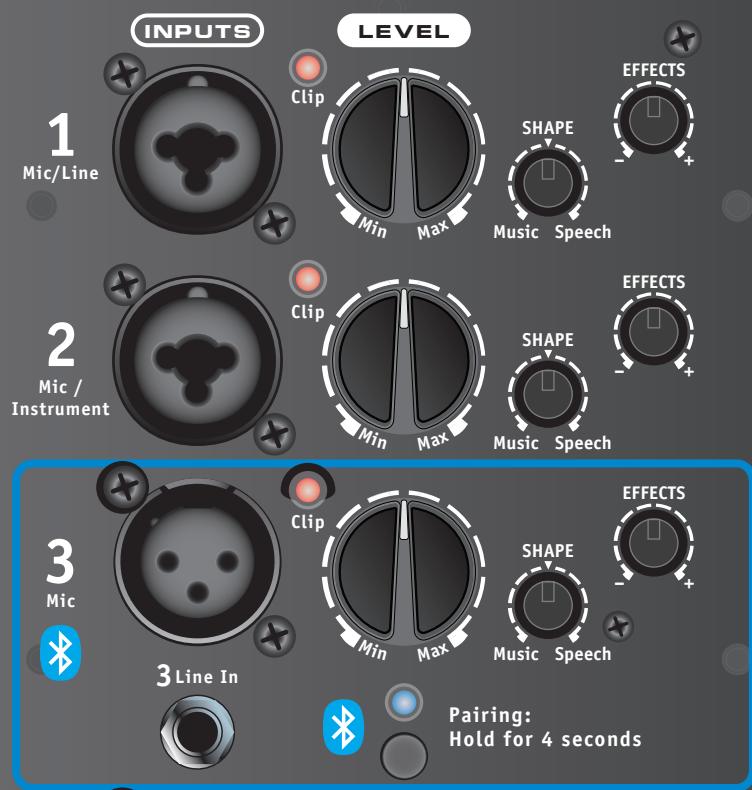
Certified
Electrical Safety
LR1004



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YORKVILLE SOUND • TORONTO, CANADA



DISCONNECT POWER BEFORE SERVICING!
DÉBRANCHER L'APPAREIL AVANT D'ENLEVER LES COUVERCLES!



To LINK, Connect the MAIN Output to the MAIN Input of another powered speaker cabinet

THIS UNIT CAN BE OPERATED WHILE CHARGING!

Bluetooth™ EXM Mobile12



CAUTION AVIS
RISK OF ELECTRIC SHOCK
DO NOT OPEN
RISQUE DE CHOC ELECTRIQUE
NE PAS OUVRIR



Contains Transmitter Module FCC ID: A8TBM20SPKXNBZ
Contains Transmitter Module ID: 12246A-BM20SPKS1
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

EXMMOBILE12

A-Z1739 / 2v1

SERIAL NUMBER

100-240 V~
50-60 Hz
100 VA



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DISCONNECT POWER BEFORE SERVICING!
DÉBRANCHER L'APPAREIL AVANT D'ENLEVER LES COUVERCLES!

NO USER SERVICEABLE PARTS INSIDE.
NE CONTIENT AUCUNE PIÈCE REPARABLE PAR L'UTILISATEUR.

Specifications			
	EXM 70	EXM Mobile	EXM Mobile12
Program Power (watts)	60 watts	60 watts	60 watts
Max SPL (dB)	115	115	120 Continuous (126 Peak)
Frequency Response (Hz +/- 3db)	90-20k	70-20k	65-18k
Speaker Configuration - LF	2 x 5-inch	2 x 6-inch	12 inch
Speaker Configuration - HF	1-inch Soft Dome	1-inch Soft Dome	1 inch exit compression driver
Inputs	3	3	3
Channel 1 Input	XLR / 1/4-inch Combi-jack	XLR / 1/4-inch Combi-jack	XLR / 1/4-inch Combi-jack
Channel 1 Controls	Level, Shape, Effects Send	Level, Shape, Effects Send	Level, Shape, Effects Send
Channel 2 Input	XLR / 1/4-inch Combi-jack	XLR / 1/4-inch Combi-jack	XLR / 1/4-inch Combi-jack
Channel 2 Controls	Level, Shape, Effects Send	Level, Shape, Effects Send	Level, Shape, Effects Send
Channel 3 Input	XLR Mic & 1/8-inch TRS Stereo Jack, Bluetooth™	XLR Mic & 1/8-inch TRS Stereo Jack, Bluetooth™	XLR Mic & 1/8-inch TRS Stereo Jack, Bluetooth™
Channel 3 Controls	Level, Shape, Effects Send, Bluetooth	Level, Shape, Effects Send, Bluetooth™	Level, Shape, Effects Send, Bluetooth™
Master Volume Control	Yes	Yes	Yes
Link In/Out (type / configuration)	XLR Connector (Male and Female)	XLR Connector (Male and Female)	XLR Connector (Male and Female)
LED Indicators	Power, Clip (CH1, CH2, CH3), Bluetooth	Power, Clip (CH1, CH2, CH3), Bluetooth, 4x Battery Level, Charging Status	Power, Clip (CH1, CH2, CH3), Bluetooth, 4x Battery Level, Charging Status
Other Features	Digital Effects (Hall Reverb, Room Reverb and Delay)	Digital Effects (Hall Reverb, Room Reverb and Delay)	Digital Effects (Hall Reverb, Room Reverb and Delay)
Power Consumption while charging (watts)	N/A	32 (battery fully discharged and unit idle)	32 (battery fully discharged and unit idle)
Dimensions (DWH xbackW, inches)	17.5 x 7.75 x 8	17.5 x 7.75 x 8	11.5 x 13.5 x 23.5
Dimensions (DWH xbackW, cm)	44.5 x 19.7 x 20.25	44.5 x 19.7 x 20.25	29 x 34 x 59.5
Weight (lbs/kg)	14.4 / 6.5	17.8 / 8.0	33.4 / 15.1

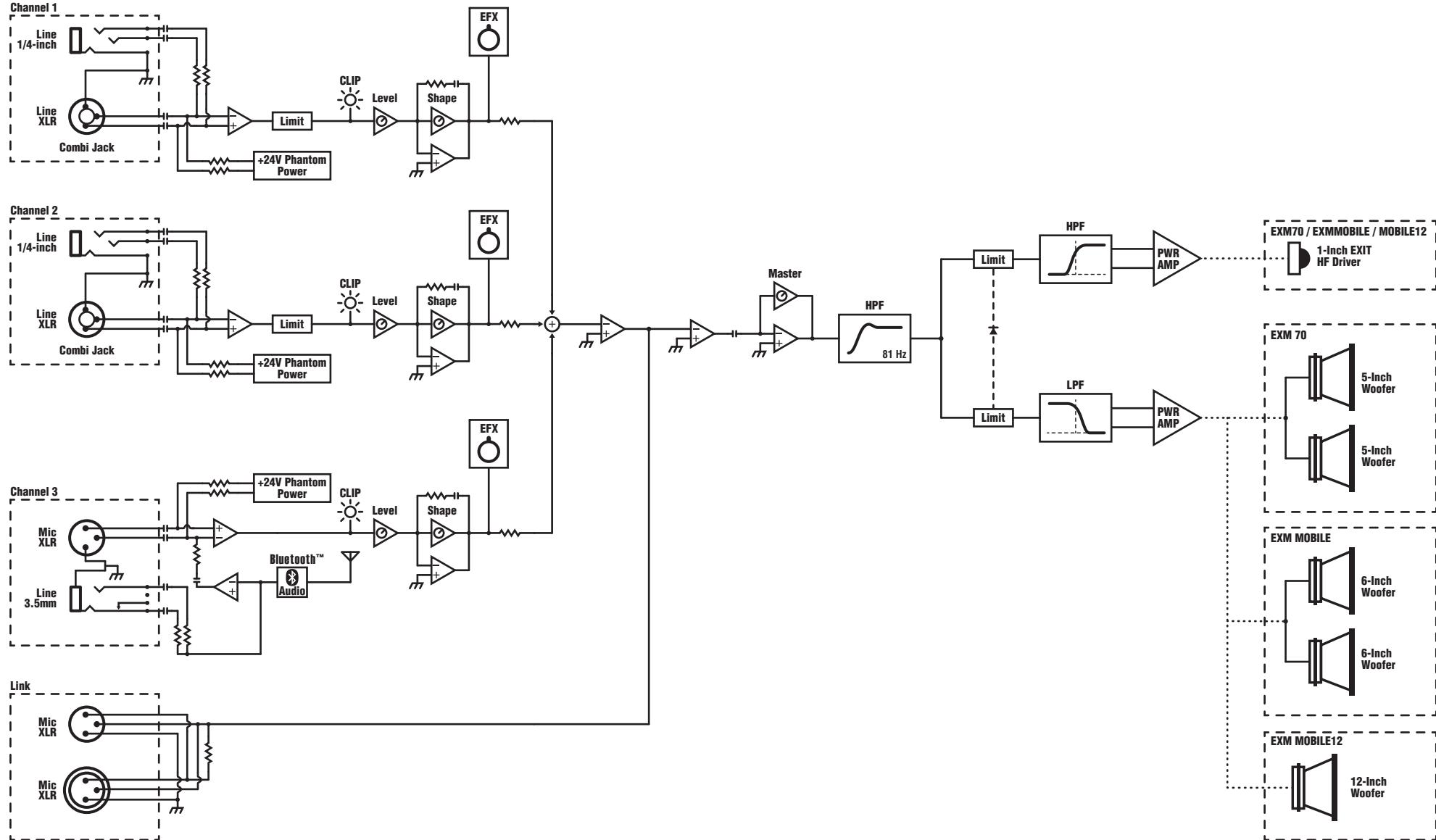
Specifications subject to change without notice

	<i>Spécifications</i>		
	EXM 70	EXM MOBILE	EXM Mobile12
Puissance programme (watts)	60 watts	60 watts	60 watts
Max SPL (dB)	115	115	120dB Continuous (126 Peak)
Réponse en Fréquence (Hz +/- 3dB)	90-20k	70-20k	65-18k
Configuration haut-parleur - Entrées	2 x 5-pouce	2 x 6-pouce	12-pouce
Configuration des haut-parleurs - HF	Dôme souple de 1 pouce	Dôme souple de 1 pouce	Dôme souple de 1 pouce
Entrées	3	3	3
Entrée du canal 1	XLR / ¼ de pouce Combi-jack	XLR / ¼ de pouce Combi-jack	XLR / ¼ de pouce Combi-jack
Commande du canal 1	Level, Shape, Effects	Level, Shape, Effects	Level, Shape, Effects
Entrée du canal 2	XLR / ¼ de pouce Combi-jack	XLR / ¼ de pouce Combi-jack	XLR / ¼ de pouce Combi-jack
Commande du canal 2	Level, Shape, Effects Send	Level, Shape, Effects Send	Level, Shape, Effects Send
Entrée du canal 3	XLR et Jack stéréo 1/8-pouce stéréo, Bluetooth™	XLR et Jack stéréo 1/8-pouce stéréo, Bluetooth™	XLR et Jack stéréo 1/8-pouce stéréo, Bluetooth™
Commande du canal 3	Level, Shape, Effects, Bluetooth	Level, Shape, Effects, Bluetooth™	Level, Shape, Effects, Bluetooth™
Master Volume Control	Oui	Oui	Oui
Entrée / Sortie Link (type / configuration)	Connecteur XLR	Connecteur XLR	XLR Connector (Male and Female)
Indicateurs DEL			Power, Clip (CH1, CH2, CH3), Bluetooth, 4x Battery Level, Charging Status
Autres caractéristiques			Effets numériques (Hall Reverb, Room Reverb and Delay)
Consommation pendant la charge (watts)	N/A	32 (batterie complètement déchargée et au repos)	Effets numériques (Hall Reverb, Room Reverb and Delay)
Dimensions (PLH x hauteurL, pouces)	17.5 x 7.75 x 8	17.5 x 7.75 x 8	32 (batterie complètement déchargée et au repos)
Dimensions (PLH x hauteurL, cm)	44.5 x 19.7 x 20.25	44.5 x 19.7 x 20.25	11.5 x 13.5 x 23.5
Poids (lb / kg)	14.4 / 6.5	17.8 / 8.0	29 x 34 x 59.5
			33.4 / 15.1

Spécifications sujettes à changement sans préavis

Block Diagram - EXM 70, EXM Mobile & Mobile12

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M1814 Parts Reference List 3/5/2020

REF	YS #	Description	REF	YS #	Description	REF	YS #	Description	REF	YS #	Description	REF	YS #	Description	
A1-A55	M1814-59	EXXMOBILE12 INPUT BOARD	C92	5631	22U 50V 20%CAP T&R 6X7MM .2EL	J1	4154	1/48XLR PCB MT VERT ACJC6A/V2L	R31B	W100 1K0 1%	0805 SMT RES	R64B	W100 6K98 1%	0805 SMT RES	
C1	5258	J 4U7 63V 20%CAP T&R 6X7MM .2EL	C95		100N 100V 10%CAP 1206 SMT X7R	J2	4152	1/48xW/XLR PCB MT VERT ACJC9A/V2L	R31C	W100 1K0 1%	0805 SMT RES	R64C	W100 6K98 1%	0805 SMT RES	
C2	5631	22U 50V 20%CAP T&R 6X7MM .2EL	C96		100N 50V 5%CAP 0805 SMT X7R	J3	4010	XLR FEMI PCB MT VERT 24MM AA-SERIES	R32A	W100 2K74 1%	0805 SMT RES	R65A	W125 8K25 1%	0805 SMT RES	
C3	5631	22U 50V 20%CAP T&R 6X7MM .2EL	C97		100N 50V 5%CAP 0805 SMT X7R	J4	4218	3.5MM JCK PCB MT V T 5PIN SUB 4186	R32B	W100 2K74 1%	0805 SMT RES	R65B	W125 8K25 1%	0805 SMT RES	
C4	5258	J 4U7 63V 20%CAP T&R 6X7MM .2EL	C98		100N 50V 5%CAP 0805 SMT X7R	J5	4010	XLR FEMI PCB MT VERT 24MM AA-SERIES	R32A	W100 1K0 1%	0805 SMT RES	R65C	W125 8K25 1%	0805 SMT RES	
C5	5258	J 4U7 63V 20%CAP T&R 6X7MM .2EL	C99		100N 50V 5%CAP 0805 SMT X7R	J6	4140	XLR MALE PCB MT VERT 24MM A-SERIES	R32B	W100 10K0 1%	0805 SMT RES	R66A	W100 4K99 1%	0805 SMT RES	
C6	5631	22U 50V 20%CAP T&R 6X7MM .2EL	C100		100N 50V 5%CAP 0805 SMT X7R	L01A		RED LED 1V5 20MA 1206 SMT	R33C	W100 1K0 1%	0805 SMT RES	R66B	W100 4K99 1%	0805 SMT RES	
C7	5631	22U 50V 20%CAP T&R 6X7MM .2EL	C101		100N 50V 5%CAP 0805 SMT X7R	L01B		RED LED 1V5 20MA 1206 SMT	R34A	W100 249R0 1%	0805 SMT RES	R66C	W100 4K99 1%	0805 SMT RES	
C8		150N 50V 5%CAP 1206 SMT X7R	C102		100N 100V 10%CAP 1206 SMT X7R	L01C		RED LED 1V5 20MA 1206 SMT	R34B	W100 249R0 1%	0805 SMT RES	R67	W100 10K0 1%	0805 SMT RES	
C9		150N 50V 5%CAP 1206 SMT X7R	C105	5212	100N 100V 5%CAP T&R RAD .2FLM	L03		RD/GN LED 1V7 20MA 0606 SMT	R35A	W100 27K4 1%	0805 SMT RES	R68	W100 475R 1%	0805 SMT RES	
C10		33N 50V 5%CAP 0805 SMT X7R	C106	5254	1U 63V 20%CAP T&R 5X7MM .2EL	L05		YEL LED 1V7 20MA 1206 SMT	R35B	W100 27K4 1%	0805 SMT RES	R69	W100 475R 1%	0805 SMT RES	
C11		33N 50V 5%CAP 0805 SMT NPO	C116		100N 50V 5%CAP 0805 SMT X7R	L06		BLU LED 2V8 20MA 1206 SMT	R36	W100 100K0 1%	0805 SMT RES	R70	W100 1K0 1%	0805 SMT RES	
C12		4N7 100V 10%CAP 0805 SMT X7R	C124	5212	100N 100V 5%CAP T&R RAD .2FLM	L07		GRN LED 2V8 20MA 1206 SMT	R37A	W100 249R0 1%	0805 SMT RES	R71	W125 3K92 1%	0805 SMT RES	
C13	5961	33U 16V 20%CAP T&R RAD .2INP	C128A		100P 100V 10%CAP 0805 SMT NPO	L08		GRN LED 2V8 20MA 1206 SMT	R37B	W100 249R0 1%	0805 SMT RES	R72	W100 1M0 1%	0805 SMT RES	
C14		270P 50V 5%CAP 0805 SMT NPO	C128B		100P 50V 10%CAP 0805 SMT NPO	L09		RED LED 1V5 20MA 1206 SMT	R38A	W100 10K0 1%	0805 SMT RES	R73	W125 22K 5%	0805 SMT RES	
C15		100P 50V 10%CAP 0805 SMT NPO	C128C		100P 50V 10%CAP 0805 SMT NPO	P1A	4483	20K 5C R/A 9MM P32	R38B	W100 10K0 1%	0805 SMT RES	R74	W125 3K92 1%	0805 SMT RES	
C16	5631	22U 50V 20%CAP T&R 6X7MM .2EL	C129		100P 50V 10%CAP 0805 SMT NPO	P1B	4483	20K 5C R/A 9MM P32	R39A	W100 475R 1%	0805 SMT RES	R75	W100 1K0 1%	0805 SMT RES	
C17	5631	22U 50V 20%CAP T&R 6X7MM .2EL	C130		100P 50V 10%CAP 0805 SMT NPO	P1C	4483	20K 5C R/A 9MM P32	R39B	W100 475R 1%	0805 SMT RES	R76	W100 1M0 1%	0805 SMT RES	
C18	5631	22U 50V 20%CAP T&R 6X7MM .2EL	C131	5631	22U 50V 20%CAP T&R 6X7MM .2EL	P2A	4472	10K B LIN 9MM P35	R40A	W100 100K0 1%	0805 SMT RES	R77	W125 3K92 1%	0805 SMT RES	
C19	5258	J 4U7 63V 20%CAP T&R 5X7MM .2EL	C134		10N 50V 5%CAP 1206 SMT NPO	P2B	4472	10K B LIN 9MM P35	R40B	W100 100K0 1%	0805 SMT RES	R78	W125 3K92 1%	0805 SMT RES	
C20	5258	J 4U7 63V 20%CAP T&R 5X7MM .2EL	C137		15N 50V 5%CAP 0805 SMT COG	P2C	4472	10K B LIN 9MM P35	R41A	W100 1K0 1%	0805 SMT RES	R79	W100 475R 1%	0805 SMT RES	
C21A	5257	J 2U2 63V 20%CAP T&R RAD .2EL	C139	5282	10U 16V 20%CAP T&R 5X7MM .2NP	P3A	4472	10K B LIN 9MM P35	R41B	W100 1K0 1%	0805 SMT RES	R81	W125 249R0 1%	0805 SMT RES	
C21B	5257	2U2 63V 20%CAP T&R RAD .2EL	C140	5631	22U 50V 20%CAP T&R 6X7MM .2EL	P3B	4472	10K B LIN 9MM P35	R41C	W100 1K0 1%	0805 SMT RES	R82	W100 2K74 1%	0805 SMT RES	
C22A		100N 50V 5%CAP 0805 SMT X7R	C143A		10P 50V 10%CAP 0805 SMT NPO	P3C	4472	10K B LIN 9MM P35	R42A	W100 499R 1%	0805 SMT RES	R83A	W120 8K25 1%	0805 SMT RES	
C22B		100N 50V 5%CAP 0805 SMT X7R	C143B		10P 50V 10%CAP 0805 SMT NPO	P5	4433	50K B LIN 9MM P32	R42B	W100 499R 1%	0805 SMT RES	R83B	W128 8K25 1%	0805 SMT RES	
C22C		100N 50V 5%CAP 0805 SMT X7R	C143C		10P 50V 10%CAP 0805 SMT NPO	PCB	M1814BLANK	1 OZ 2SD 79.6550IN 02P EXXMOBILE12	R42C	W100 499R 1%	0805 SMT RES	R83C	W120 8K25 1%	0805 SMT RES	
C23A		330P 50V 5%CAP 0805 SMT NPO	C144		10P 50V 10%CAP 0805 SMT NPO	Q1A		MMBT3906LT1PNP SOT-23 SMT T&R	R43A	W100 1K0 1%	0805 SMT RES	R84	W100 2K74 1%	0805 SMT RES	
C23B		330P 50V 5%CAP 0805 SMT NPO	C145		10P 50V 10%CAP 0805 SMT NPO	Q1B		MMBT3906LT1PNP SOT-23 SMT T&R	R43B	W100 1K0 1%	0805 SMT RES	R85	W125 3K32 1%	0805 SMT RES	
C23C		330P 50V 5%CAP 0805 SMT NPO	C146		10N 50V 5%CAP 0805 SMT X7R	Q2A		BC847C 0.1A NPN 45V SOT-23 SMT	R43C	W100 1K0 1%	0805 SMT RES	R86	W100 10K0 1%	0803 SMT RES	
C24A	5879	100U 16V 20%CAP T&R 6X7MM .2EL	C160	5961	33U 16V 20%CAP T&R RAD .2INP	Q2B		BC847C 0.1A NPN 45V SOT-23 SMT	R45A	W100 40K2 1%	0805 SMT RES	R88	W100 4K99 1%	0805 SMT RES	
C24B	5879	100U 16V 20%CAP T&R 6X7MM .2EL	C171		10N 50V 5%CAP 1206 SMT NPO	Q3A		BC847C 0.1A NPN 45V SOT-23 SMT	R45B	W100 40K2 1%	0805 SMT RES	R94	W100 100K0 1%	0805 SMT RES	
C24C	5879	100U 16V 20%CAP T&R 6X7MM .2EL	C172		10N 50V 5%CAP 0805 SMT X7R	Q3B		BC847C 0.1A NPN 45V SOT-23 SMT	R45C	W100 40K2 1%	0805 SMT RES	R96	W100 1K0 1%	0805 SMT RES	
C25A		1N 50V 5%CAP 0805 SMT NPO	C175		10U 16V 10%CAP 1206 SMT X7R	Q4A		MMBT1414 NPN DRL SOT-23 SMT	R46A	W100 249R0 1%	0805 SMT RES	R98	W100 27K4 1%	0805 SMT RES	
C25B		1N 50V 5%CAP 0805 SMT NPO	C177		10N 50V 5%CAP 0805 SMT X7R	Q4B		MMBT1414 NPN DRL SOT-23 SMT	R46B	W100 249R0 1%	0805 SMT RES	R112	W100 475R 1%	0805 SMT RES	
C25C		1N 50V 5%CAP 0805 SMT NPO	C179		10U 50V 10%CAP 1206 SMT CER	Q4C		MMBT1414 NPN DRL SOT-23 SMT	R46C	W100 249R0 1%	0805 SMT RES	R122	W125 39K2 1%	0805 SMT RES	
C26A		1N 50V 5%CAP 0805 SMT NPO	C180		100N 100V 10%CAP 1206 SMT X7R	Q6		MMBFJ110 NCH JFET SOT-23 SMT	R47A	W100 562R0 1%	0805 SMT RES	R136	W100 1K0 1%	0805 SMT RES	
C26B		1N 50V 5%CAP 0805 SMT NPO	D2A		PMML4148 75V 0A2 SOD80C SMT	Q7		MMBFJ110 NCH JFET SOT-23 SMT	R47B	W100 562R0 1%	0805 SMT RES	R146	W100 2K0 1%	0805 SMT RES	
C26C		1N 50V 5%CAP 0805 SMT NPO	D2B		PMML4148 75V 0A2 SOD80C SMT	Q12		MMBT3906LT1PNP SOT-23 SMT T&R	R47C	W100 562R0 1%	0805 SMT RES	R148	W250 1R 5%	1206 SMT RES	
C27A	5961	33U 16V 20%CAP T&R RAD .2INP	D3A		MMBZ5227B 3V6 0W35 .5% SMT ZEN	Q13		MMBFJ110 NCH JFET SOT-23 SMT	R48A	W100 4K99 1%	0805 SMT RES	R149	W250 1R 5%	1206 SMT RES	
C27B	5961	33U 16V 20%CAP T&R RAD .2INP	D3B		MMBZ5227B 3V6 0W35 .5% SMT ZEN	Q14		2N7002 NCH FET SOT-23 SMT T&R	R48B	W100 4K99 1%	0805 SMT RES	R150	W125 22K 5%	0805 SMT RES	
C27C	5961	33U 16V 20%CAP T&R RAD .2INP	D3C		MMBZ5227B 3V6 0W35 .5% SMT ZEN	Q15		MMBT3906LT1PNP SOT-23 SMT T&R	R48C	W100 4K99 1%	0805 SMT RES	R151	W100 2K74 1%	0805 SMT RES	
C28A		1N 50V 5%CAP 0805 SMT NPO	D4A		PMML4148 75V 0A2 SOD80C SMT	Q20		NCH FET SOT-23 SMT T&R	R49A	W100 4M7 5%	0805 SMT RES	R152	W100 10K0 1%	0803 SMT RES	
C28B		1N 50V 5%CAP 0805 SMT NPO	D4B		PMML4148 75V 0A2 SOD80C SMT	Q21		NCH FET SOT-23 SMT T&R	R49B	W100 4M7 5%	0805 SMT RES	R153	W100 4K99 1%	0805 SMT RES	
C28C		1N 50V 5%CAP 0805 SMT NPO	D4C		PMML4148 75V 0A2 SOD80C SMT	Q22		2N7002 NCH FET SOT-23 SMT T&R	R49C	W100 4M7 5%	0805 SMT RES	R154	W120 22K 5%	0805 SMT RES	
C29A	5282	10U 16V 20%CAP T&R 5X7MM .2NP	D6A		RLZ7.5B 7V5 0W5 .6% SMT ZEN	Q23		2N7002 NCH FET SOT-23 SMT T&R	R50A	W100 40K2 1%	0805 SMT RES	R155	W125 22K 5%	0805 SMT RES	
C29B	5282	10U 16V 20%CAP T&R 5X7MM .2NP	D6B		RLZ7.5B 7V5 0W5 .6% SMT ZEN	Q28		BC847C 0.1A NPN 45V SOT-23 SMT	R50B	W100 40K2 1%	0805 SMT RES	R156	W100 10K0 1%	0803 SMT RES	
C29C	5282	10U 16V 20%CAP T&R 5X7MM .2NP	D11A		PMLL4148 75V 0A2 SOD80C SMT	Q31		BC847C 0.1A NPN 45V SOT-23 SMT	R50C	W100 40K2 1%	0805 SMT RES	R157	W125 249R0 1%	0805 SMT RES	
C30A		1N 50V 5%CAP 0805 SMT NPO	D11B		PMLL4148 75V 0A2 SOD80C SMT	Q36		BC847C 0.1A NPN 45V SOT-23 SMT	R51	W100 10K0 1%	0803 SMT RES	R158	W100 10K0 1%	0803 SMT RES	
C30B		1N 50V 5%CAP 0805 SMT NPO	D11C		PMLL4148 75V 0A2 SOD80C SMT	Q37		PMML4148 75V 0A2 SOD80C SMT	R52A	W100 12K1 1%	0803 SMT RES	R159	W100 1M0 1%	0803 SMT RES	
C30C		1N 50V 5%CAP 0805 SMT NPO	D12		PMML4148 75V 0A2 SOD80C SMT	Q38		PMML4148 75V 0A2 SOD80C SMT	R52B	W100 12K1 1%	0803 SMT RES	R160	W100 1K0 1%	0803 SMT RES	
C31A		100N 50V 5%CAP 0805 SMT X7R	D16		SMJS5339B 5V6 5W0 DO214AA SMT ZEN	R1A		W100 1K0 1%	0805 SMT RES	R52C	W100 12K1 1%	0803 SMT RES	R161	W100 10K0 1%	0603 SMT RES
C31B		100N 50V 5%CAP 0805 SMT X7R	D17		SMJS5230B 4V7.0W5 SOD123 SMT ZEN	R1B		W100 1K0 1%	0805 SMT RES	R53A	W100 100R 1%	0805 SMT RES	R164	W125 22K 5%	0805 SMT RES
C31C		100N 50V 5%CAP 0805 SMT X7R	D22		MMBZ5227B 3V6 0W35 .5% SMT ZEN	R1C		W100 1K0 1%	0805 SMT RES	R53B	W100 100R 1%	0805 SMT RES	R167	W100 2K74 1%	0805 SMT RES
C32A		100N 50V 5%CAP 0805 SMT X7R	D23		BAV21WWS 200V 0A2 SOD923 SMT	R2		W100 2K0 1%	0805 SMT RES	R53C	W100 100R 1%	0805 SMT RES	R169	W100 4K99 1%	0805 SMT RES
C32B		100N 50V 5%CAP 0805 SMT X7R	D25		PMML4148 75V 0A2 SOD80C SMT	R3		W100 2K0 1%	0805 SMT RES	R54A	W100 15K0 1%	0805 SMT RES	R170	W100 2K74 1%	0805 SMT RES
C32C		100N 50V 5%CAP 0805 SMT X7R	D27		PMML4148 75V 0A2 SOD80C SMT	R6		W100 4K99 1%	0805 SMT RES	R54B	W100 15K0 1%	0805 SMT RES	R171	W125 249R0 1%	0805 SMT RES
C33	470P	50V 5%CAP 0603 SMT NPO	D28		PMML4148 75V 0A2 SOD80C SMT	R7		W100 4K99 1%	0805 SMT RES	R54C	W100 15K0 1%	0805 SMT RES	R172	W100 27K4 1%	0805 SMT RES
C34		1N 50V 5%CAP													

M1814 (2) Parts Reference List 3/5/2020

M1815 Parts Reference List 3/5/2020

REF	YS #	Description	REF	YS #	Description	REF	YS #	Description	REF	YS #	Description	REF	YS #	Description	
A1-ASS	M1815-59	EXXMOBILE12AMP/PS BOARD	C161	5229	150N 63V 10%CAP T&R RAD .2FLM	R103		W100 47K5 1%	0805 SMT RES	R188H		W125 5K36 1%	0805 SMT RES		
C37	1U0 50V 10%CAP	1206 SMT CER	C162	5229	150N 63V 10%CAP T&R RAD .2FLM	R103H		W125 3K32 1%	0805 SMT RES	R188L		W125 5K36 1%	0805 SMT RES		
C37H	270P 50V 5%CAP	0805 SMT NPO	C163		150N 25V 10%CAP 0603 SMT X7R	R103L		W125 3K32 1%	0805 SMT RES	R189		W100 10K0 1%	0805 SMT RES		
C37L	270P 50V 5%CAP	0805 SMT NPO	C164		150N 25V 10%CAP 0603 SMT X7R	R104		W100 10K0 1%	0805 SMT RES	R190		W250 2R4 5%	1206 SMT RES		
C38	470N 50V 5%CAP	1206 SMT X7R	C165		150N 25V 10%CAP 0603 SMT X7R	R104H		W100 6K98 1%	0805 SMT RES	R191		W250 2R4 5%	1206 SMT RES		
C38H	5257	2U2 63V 20%CAP T&R RAD .2EL	C166		150N 25V 10%CAP 0603 SMT X7R	R104L		W100 4K75 1%	0805 SMT RES	R193		W100 10K0 1%	0603 SMT RES		
C38L	5257	2U2 63V 20%CAP T&R RAD .2EL	C168	5229	150N 63V 10%CAP T&R RAD .2FLM	R105		W125 200K0 .1%	0805 SMT RES	R196		W100 47K5 1%	0805 SMT RES		
C40	470N 50V 5%CAP	1206 SMT X7R	C169		100N 50V 5%CAP 0805 SMT X7R	R105H		W100 4K75 1%	0805 SMT RES	R198		W125 1K21 1%	0805 SMT RES		
C40H	180P 50V 5%CAP	0805 SMT NPO	C176		100N 50V 5%CAP 0805 SMT X7R	R105L		W100 4K75 1%	0805 SMT RES	R199		W125 5K76 1%	0805 SMT RES		
C40L	180P 50V 5%CAP	0805 SMT NPO	C196	5254	1U 63V 20%CAP T&R 5X7MM .2EL	R106		W100 10K0 1%	0805 SMT RES	R202		W100 10K0 1%	0805 SMT RES		
C41H	5282	1U0 16V 20%CAP T&R 5X7MM .2NP	C197		100N 50V 5%CAP 0805 SMT X7R	R106H		W125 47K5 1%	0805 SMT RES	R204		W100 1M0 1%	0805 SMT RES		
C41L	5254	1U 63V 20%CAP T&R 5X7MM .2EL	D1		PMLL4148 75V 0A2 SOD80C SMT	R106L		W125 47K5 1%	0805 SMT RES	R205		W100 27K4 1%	0805 SMT RES		
C42H	5282	1U0 16V 20%CAP T&R 5X7MM .2NP	D5		B340 40V 3A SCH SMC SMT	R107		W100 10K0 1%	0805 SMT RES	R209		W125 5K76 1%	0805 SMT RES		
C42L	5229	150N 63V 10%CAP T&R RAD .2FLM	D9		MM3Z18VT1G 18V 0W2 .5% SMT ZEN	R107H		W100 10K0 1%	0805 SMT RES	R210		W100 10K0 1%	0805 SMT RES		
C43	5268	220U 35V 20%CAP T&R RAD .2EL	D9H		PMLL4148 75V 0A2 SOD80C SMT	R107L		W125 47K5 1%	0805 SMT RES	R212		W100 39R .5%	0805 SMT RES		
C44	1N 50V 5%CAP	0805 SMT NPO	D9L		CDBF0130L 30V 1A SCH SOD323F SMT	R108		W100 1K0 1%	0805 SMT RES	R217		1W00 0R01 1% CURR SENS SMT RES			
C45	100N 50V 5%CAP	0805 SMT X7R	D10		B340 40V 3A SCH SMC SMT	R108H		W125 562R0 1%	0805 SMT RES	R218		W100 10K0 1%	0805 SMT RES		
C46	150N 25V 10%CAP	0603 SMT X7R	D10H		PMLL4148 75V 0A2 SOD80C SMT	R108L		W100 2K0 1%	0805 SMT RES	R221		W100 47K5 1%	0805 SMT RES		
C47	330P 50V 5%CAP	0805 SMT NPO	D11H		PMLL4148 75V 0A2 SOD80C SMT	R109		W100 100R 1%	0805 SMT RES	R234		W100 100K0 1%	0805 SMT RES		
C48	5254	1U 63V 20%CAP T&R 5X7MM .2EL	D13		MM3Z5230B 4V7.0W5 SOD123 SMT ZEN	R109H		W100 18K2 1%	0805 SMT RES	R237		W125 5K76 1%	0805 SMT RES		
C49	5254	1U 63V 20%CAP T&R 5X7MM .2EL	D14		MM3Z5230B 4V7.0W5 SOD123 SMT ZEN	R109L		W100 18K2 1%	0805 SMT RES	R238		W125 11K0 1%	0805 SMT RES		
C50	150N 25V 10%CAP	0603 SMT X7R	D14H		PMLL4148 75V 0A2 SOD80C SMT	R110		W100 100R 1%	0805 SMT RES	R243		W100 39R .5%	0805 SMT RES		
C51	330P 50V 5%CAP	0805 SMT NPO	D14L		PMLL4148 75V 0A2 SOD80C SMT	R110H		W100 100R 1%	0805 SMT RES	R245		W125 5K36 1%	0805 SMT RES		
C52	5240	680N 63V 10%CAP T&R RAD .2FLM	D15		MM3Z5230B 4V7.0W5 SOD123 SMT ZEN	R110L		W125 47K5 1%	0805 SMT RES	R250		W125 249R0 1%	0805 SMT RES		
C53	5240	680N 63V 10%CAP T&R RAD .2FLM	D15H		PMLL4148 75V 0A2 SOD80C SMT	R111		W125 200K0 .1%	0805 SMT RES	R254		W125 249R0 1%	0805 SMT RES		
C54	150N 25V 10%CAP	0603 SMT X7R	D15L		PMLL4148 75V 0A2 SOD80C SMT	R111H		W100 100R 1%	0805 SMT RES	R262		W125 47K5 1%	0805 SMT RES		
C55	5254	1U 63V 20%CAP T&R 5X7MM .2EL	D16L		PMLL4148 75V 0A2 SOD80C SMT	R111L		W100 100R 1%	0805 SMT RES	R267		W125 249R0 1%	0805 SMT RES		
C56	5254	1U 63V 20%CAP T&R 5X7MM .2EL	D18		RL27.5B 7V 0W5 .6% SMT ZEN	R112H		W125 62K .5%	0805 SMT RES	R268		W100 47K5 1%	0805 SMT RES		
C58	150N 25V 10%CAP	0603 SMT X7R	D19		RL27.5B 7V 0W5 .6% SMT ZEN	R112L		W125 47K5 1%	0805 SMT RES	R270		W125 5K36 1%	0805 SMT RES		
C59	330P 50V 5%CAP	0805 SMT NPO	D20		PMLL4148 75V 0A2 SOD80C SMT	R113H		W100 13K 1%	0805 SMT RES	R271		W100 47K5 1%	0805 SMT RES		
C61	10N 50V 5%CAP	1206 SMT NPO	D21		PMLL4148 75V 0A2 SOD80C SMT	R113L		W100 13K 1%	0805 SMT RES	R272		W125 6K20 1%	0805 SMT RES		
C62	1N50V 5%CAP	0805 SMT NPO	D24		B160-E3 60V 1A0 SCH D0214AC SMT	R114L		W100 47K5 1%	0805 SMT RES	R273		W100 10K0 1%	0603 SMT RES		
C64	10N 50V 5%CAP	1206 SMT NPO	D26		B340 40V 3A SCH SMC SMT	R115H		W100 100R 1%	0805 SMT RES	R274		W100 10K0 1%	0603 SMT RES		
C66	10N 50V 5%CAP	1206 SMT NPO	D30		B340 40V 3A SCH SMC SMT	R115L		W100 100R 1%	0805 SMT RES	R275		W100 10K0 1%	0603 SMT RES		
C67	10N 50V 5%CAP	1206 SMT NPO	D45		PMLL4148 75V 0A2 SOD80C SMT	R116H		W100 10K0 1%	0805 SMT RES	R279		W125 1M300 .1%	0805 SMT RES		
C68	150N 25V 10%CAP	0603 SMT X7R	D47		MMBZ5227B 3V6 0W35 .5% SMT ZEN	R116L		W100 10K0 1%	0805 SMT RES	R281		W100 20K5 1%	0805 SMT RES		
C69	330P 50V 5%CAP	0805 SMT NPO	D48		B160-E3 60V 1A0 SCH D0214AC SMT	R117H		W100 10M 1%	0805 SMT RES	R293		W100 100K0 1%	0805 SMT RES		
C70	5240	680N 63V 10%CAP T&R RAD .2FLM	D49		PMLL4148 75V 0A2 SOD80C SMT	R117L		W100 10M 1%	0805 SMT RES	R294		W125 47K5 1%	0805 SMT RES		
C71	5240	680N 63V 10%CAP T&R RAD .2FLM	D53		PMLL4148 75V 0A2 SOD80C SMT	R118H		W100 10M 1%	0805 SMT RES	R295		W125 1K21 1%	0805 SMT RES		
C72	5268	220U 35V 20%CAP T&R RAD .2EL	F1	2494	FUSE 5A0 250V TIME DELAY T&R	R118L		W100 10M 1%	0805 SMT RES	R297		W100 39R .5%	0805 SMT RES		
C73	1N 50V 5%CAP	0805 SMT NPO	HS1	6698	HEATSINK TPA3116D2 W30XL1X12 ALUM	R119H		W100 15K0 1%	0805 SMT RES	R315		W100 100R 1%	0805 SMT RES		
C79	100N 50V 5%CAP	0805 SMT X7R	HW1	4236	GAPPAD GR25A 2.0MM 14X11MM	R119L		W100 15K0 1%	0805 SMT RES	R316		W100 100R 1%	0805 SMT RES		
C93	10N 50V 10%CAP	0805 SMT NPO	HW9	8807	6-32X516 PAN PH MS JS500	R120		W125 0R 5%	0805 SMT RES	R317		W100 20K5 1%	0805 SMT RES		
C94	5254	1U 63V 20%CAP T&R 5X7MM .2EL	HW10	8807	6-32X516 PAN PH MS JS500	R120L		W125 8K25 1%	0805 SMT RES	R318		W100 100R 1%	0805 SMT RES		
C103	150N 25V 10%CAP	0603 SMT X7R	L1		10.0UH 20% COIL 12MM SMT	R121		W125 10R0 1%	0805 SMT RES	R319		W100 100R 1%	0805 SMT RES		
C104	5204	10N 100V 10%CAP T&R RAD .2FLM	L2		10.0UH 20% COIL 12MM SMT	R123		W100 4K75 1%	0805 SMT RES	R320		W100 10R 1%	0805 SMT RES		
C107	5879	100U 16V 20%CAP T&R 8X7MM .2EL	L3		10.0UH 20% COIL 12MM SMT	R124		W125 10R0 1%	0805 SMT RES	R321		W100 10R 1%	0805 SMT RES		
C108	5254	1U 63V 20%CAP T&R 5X7MM .2EL	L4		10.0UH 20% COIL 12MM SMT	R125		W125 10R0 1%	0805 SMT RES	R322		W100 10R 1%	0805 SMT RES		
C109	100N 50V 5%CAP	0805 SMT X7R	L5	3306	47UH CHOKE 0R08 RAD	R126		W125 5K76 1%	0805 SMT RES	R325		W125 5K62 1%	0805 SMT RES		
C110	5204	10N 100V 10%CAP T&R RAD .2FLM	L6		220.0UH COIL SMT	R127		W500 3R3 5%	1210 SMT RES	R326		W100 4K75 1%	0805 SMT RES		
C111	5208	2N400V 5%CAP T&R RAD .2FLM	L8		FERRITE BEAD 1A5 26G SMT	R128		W500 3R3 5%	1210 SMT RES	R327		W125 1K62 1%	0805 SMT RES		
C112	5208	2N400V 5%CAP T&R RAD .2FLM	PCB	M1815BLANK	1 OZ 2SD 58.9SQIN 02P EXXMOBILE12	R129		W500 3R3 5%	1210 SMT RES	SNL1	8370	1 MIL POLYIMIDE LABEL 1" X .380"			
C113	5254	1U 63V 20%CAP T&R 5X7MM .2EL	Q5		2N7002 NCH FET SOT-23 SMT T&R	R130		W500 3R3 5%	1210 SMT RES	U6		MAX1720S XDUCTORY MTR T1432-3 SMT			
C114	5254	1U 63V 20%CAP T&R 5X7MM .2EL	Q8		2N7002 NCH FET SOT-23 SMT T&R	R131		W125 10R0 1%	0805 SMT RES	U7		LM13700M XDUCTANC AMP SMT IC			
C115	5254	1U 63V 20%CAP T&R 5X7MM .2EL	Q8L		BC847C 0.1A NP0 45V SOT-23 SMT	R132		W100 1K0 1%	0805 SMT RES	U8		TPA3116D2DAD ST AMP TSSOP32P IC SMT			
C117	5209	4N7 250V 5%CAP T&R RAD .2FLM	Q9L		BC847C 0.1A NP0 45V SOT-23 SMT	R133		W750 0R 1% 2010.0MTR	0.5% 2010.0MTR	U12		33078 DUAL OPAMP SMT SO-8			
C118	100N 50V 5%CAP	0805 SMT X7R	Q10H		MBMT3906LT1PN SOT-23 SMT T&R	R134		W100 4K75 1%	0805 SMT RES	U14		MC30709D QUAD OPAMP SMT SO14			
C119	150P 50V 5%CAP	0805 SMT NPO	Q10L		MBMT3906LT1PN SOT-23 SMT T&R	R135		W125 3K32 1%	0805 SMT RES	U15		TL072 DUAL OPAMP SMT SO-8			
C120	10N 50V 5%CAP	1206 SMT NPO	Q11		NTD20P06L PCH MFET D2PAK SMT	R137		W100 1K0 1%	0805 SMT RES	U18		MC33063ADR BUCK BOOST INV IC SO8			
C121	1N 50V 5%CAP	0805 SMT NPO	Q18		MC78M05BDTR POS REG SMT DPAK3	R138		W100 100K0 1%	0805 SMT RES	U20		MKL15264VLH4 48MHZ MCU SMT LQFP64			
C122	180P 50V 5%CAP	0805 SMT NPO	Q19		MC78M05BDTR POS REG SMT DPAK3	R139		W100 100R 1%	0805 SMT RES	U21		LM3409 PFET BUCK SMT IC VSSOP-10P			
C123	5275	3N3 100V .5%CAP T&R RAD .2FLM	Q24		FDN5618 PCH MFET SOT-23 SMT	R140		W125 1M300 .1%	0805 SMT RES	U22		33078 DUAL OPAMP SMT SO-8			
C125	100N 50V 5%CAP	0805 SMT X7R	Q25		2SC4027 NPN DPAK3 SMT TR	R141		W125 47K5 1%	0805 SMT RES	U23	7012	LP2950-33 LDPR T092 FIXED 3V3 REG			
C127	5240	680N 63V 10%CAP T&R RAD .2FLM	Q26		2N7002 NCH FET SOT-23 SMT T&R	R142		W100 100K0 1%	0805 SMT RES	W1		24 PIN BREAKAWAY LOCK .156			
C132	100N 50V 5%CAP	0805 SMT X7R	Q27		2SA1552 PNP DPAK3 SMT TR	R144		W250 10R 5%	1206 SMT RES						

M1816 Parts Reference List 3/5/2020

M1914 02 P1 Parts Reference List 11/27/2020

REF	YS #	Description	REF	YS #	Description	REF	YS #	Description	REF	YS #	Description	REF	YS #	Description
A1-ASS	M1914-59	EXMMBVE12 M1940 M1919 M1942 BRDS	C48	5231	220N 63V 5%CAP T&R RAD .2FLM	C128C		100P 50V 10%CAP 0805 SMT NPO	D6B	PMLL4148 75V 0A2 SOD80C SMT	LD3	RD/GN LED 1V7 20MA 0606 SMT		
BW2	W250 2R 5%	1206 SMT RES	C49	5231	220N 63V 5%CAP T&R RAD .2FLM	C129		100P 50V 10%CAP 0805 SMT NPO	D7	PMLL4148 75V 0A2 SOD80C SMT	LDS	YEL LED 1V7 20MA 1206 SMT		
C1	4U7 25V 20%CAP 4X5.5 SMT ELC	C50	150N 15V 10%CAP 0603 SMT X7R	C130		100P 50V 10%CAP 0805 SMT NPO	D8A	MMBZ5227B 3V6 0W35 5% SMT ZEN	L6D	BLU LED 2V8 20MA 1206 SMT				
C2	10U 25V 20%CAP 5X5.4 SMT EL	C51	330P 50V 5%CAP 0805 SMT NPO	C131		100N 50V 5%CAP 0805 SMT X7R	D8B	MMBZ5227B 3V6 0W35 5% SMT ZEN	L7D	GRN LED 2V8 20MA 1206 SMT				
C3	10U 25V 20%CAP 4X5.5 SMT ELC	C52	5240	680N 63V 10%CAP T&R RAD .2FLM	C132	100U 25V 20%CAP 8X5.4 SMT ELE	D9	B160-E3 60V 1A0 SCH D0214AC SMT	LDB	GRN LED 2V8 20MA 1206 SMT				
C4	4U7 25V 20%CAP 4X5.5 SMT ELC	C53	680N 63V 10%CAP T&R RAD .2FLM	C133	1N 50V 5%CAP 0805 SMT NPO	D9H	PMLL4148 75V 0A2 SOD80C SMT	LD9	RED LED 1V5 20MA 1206 SMT					
C5	4U7 25V 20%CAP 4X5.5 SMT ELC	C54	150N 25V 10%CAP 0603 SMT X7R	C134	10N 50V 5%CAP 1206 SMT NPO	D9L	CDBF0130L 30V 1A SCH SOD323F SMT	M1912	LM339N QUAD SS COMP SMT SO-14					
C6	10U 25V 20%CAP 5X5.4 SMT EL	C55	5231	220N 63V 5%CAP T&R RAD .2FLM	C135	1U0 50V 10%CAP 1206 SMT CER	D10	B340 40V 3A SCH SMC SMT	M1913	LM339N QUAD SS COMP SMT SO-14				
C7	10U 25V 20%CAP 5X5.4 SMT EL	C56	5231	220N 63V 5%CAP T&R RAD .2FLM	C137A	100N 50V 5%CAP 0805 SMT X7R	D10H	PMLL4148 75V 0A2 SOD80C SMT	M1941	LM339N QUAD SS COMP SMT SO-14				
C8	150N 50V 5%CAP 1206 SMT X7R	C57	10U 25V 20%CAP 5X5.4 SMT EL	C137B	100N 50V 5%CAP 0805 SMT X7R	D11A	PMLL4148 75V 0A2 SOD80C SMT	F1A	20K 5C R/A 9MM DET HI TORQ P32					
C9	150N 50V 5%CAP 1206 SMT X7R	C58	150N 25V 10%CAP 0603 SMT X7R	C137C	100N 50V 5%CAP 0805 SMT X7R	D11B	PMLL4148 75V 0A2 SOD80C SMT	F1B	20K 5C R/A 9MM DET HI TORQ P32					
C10	33N 50V 5%CAP 0805 SMT X7R	C59	330P 50V 5%CAP 0805 SMT NPO	C138	10U 25V 20%CAP 5X5.4 SMT EL	D11C	PMLL4148 75V 0A2 SOD80C SMT	F1C	20K 5C R/A 9MM DET HI TORQ P32					
C11	330P 50V 5%CAP 0805 SMT NPO	C60	100U 25V 20%CAP 8X5.4 SMT ELE	C139	10U 25V 20%CAP 5X5.4 SMT EL	D11H	PMLL4148 75V 0A2 SOD80C SMT	F2A	10K B LIN 9MM P35					
C12	4N7 50V 10%CAP 0805 SMT X7R	C61	10N 50V 5%CAP 1206 SMT NPO	C140	10U 25V 20%CAP 5X5.4 SMT EL	D12	PMLL4148 75V 0A2 SOD80C SMT	F2B	10K B LIN 9MM P35					
C13	22U 16V 5%CAP 5X5.4 SMT ELC	C62	680U 6V3 20%CAP 8X10 SMT ELE	C141	4U7 50V 10%CAP 1210 SMT CER	D13	PMLL4148 75V 0A2 SOD80C SMT	F2C	10K B LIN 9MM P35					
C14	270P 50V 5%CAP 0805 SMT NPO	C63	10N 50V 5%CAP 1206 SMT NPO	C142	4U7 50V 10%CAP 1210 SMT CER	D14	RLZ7.5B 7V5 0W5 6% SMT ZEN	F3A	50K B LIN 9MM P35					
C15	100P 50V 10%CAP 0805 SMT NPO	C64	10N 50V 5%CAP 1206 SMT NPO	C143A	180P 50V 5%CAP 0805 SMT NPO	D15	PMLL4148 75V 0A2 SOD80C SMT	F3B	50K B LIN 9MM P35					
C16	10U 25V 20%CAP 5X5.4 SMT EL	C65	100U 25V 20%CAP 8X5.4 SMT ELE	C143B	180P 50V 5%CAP 0805 SMT NPO	D15H	PMLL4148 75V 0A2 SOD80C SMT	F3C	50K B LIN 9MM P35					
C17	10U 25V 20%CAP 5X5.4 SMT EL	C66	10N 50V 5%CAP 1206 SMT NPO	C143C	180P 50V 5%CAP 0805 SMT NPO	D15L	PMLL4148 75V 0A2 SOD80C SMT	F5	50K B LIN 9MM P32					
C18	10U 25V 20%CAP 5X5.4 SMT EL	C67	10N 50V 5%CAP 1206 SMT NPO	C144	1U 20V 20%CAP 3.3MM SMT ELE	D16	SMBJS339B 5V6 5W0 DO214AA SMT ZEN	EBC1	X8039BLANK 1-02 2SD 79.5SIN 01PER MOBILE					
C19	4U7 25V 20%CAP 4X5.5 SMT ELC	C68	150N 25V 10%CAP 0603 SMT X7R	C145	4U7 25V 20%CAP 4X5.5 SMT ELC	D16L	PMLL4148 75V 0A2 SOD80C SMT	G1A	MMBT3906LT1 PNPN SOT-23 SMT T&R					
C20	4U7 25V 20%CAP 4X5.5 SMT ELC	C69	330P 50V 5%CAP 0805 SMT NPO	C146	100N 50V 5%CAP 0805 SMT X7R	D17	PMLL4148 75V 0A2 SOD80C SMT	G1B	MMBT3906LT1 PNPN SOT-23 SMT T&R					
C21A	4U7 25V 20%CAP 4X5.5 SMT ELC	C70	5240	680N 63V 10%CAP T&R RAD .2FLM	C147	1U0 50V 10%CAP 1206 SMT CER	D18	RLZ7.5B 7V5 0W5 6% SMT ZEN	G2	BC847C 0.1A NPN 45V SOT-23 SMT				
C21B	4U7 25V 20%CAP 4X5.5 SMT ELC	C71	5240	680N 63V 10%CAP T&R RAD .2FLM	C148	1N 50V 5%CAP 0805 SMT NPO	D19	RLZ7.5B 7V5 0W5 6% SMT ZEN	G4A	MMBT14 PNPN DARL SOT-23 SMT				
C22A	10N 50V 5%CAP 1206 SMT NPO	C72	220U 35V 20%CAP 8X10 SMT ELE	C149	1U0 50V 10%CAP 1206 SMT CER	D20	PMLL4148 75V 0A2 SOD80C SMT	G4B	MMBT14 PNPN DARL SOT-23 SMT					
C22B	10N 50V 5%CAP 1206 SMT NPO	C73	1N 50V 5%CAP 0805 SMT NPO	C150	47P 50V 5%CAP 0805 SMT NPO	D21	PMLL4148 75V 0A2 SOD80C SMT	G4C	MMBT14 PNPN DARL SOT-23 SMT					
C22C	10N 50V 5%CAP 1206 SMT NPO	C74	100N 50V 5%CAP 0805 SMT X7R	C151	1U0 50V 10%CAP 1206 SMT CER	D22	PMLL4148 75V 0A2 SOD80C SMT	G6	MMBFJ11A NCH JFET SOT-23 SMT					
C23A	47P 50V 5%CAP 0805 SMT NPO	C75	100N 50V 5%CAP 0805 SMT X7R	C152	180P 50V 5%CAP 0805 SMT NPO	D23	BAV21WS 200V 0A2 SOD233 SMT	Q8	TL431A 3 TER ADJ VREG SOT-23 SMT					
C23B	47P 50V 5%CAP 0805 SMT NPO	C76	100N 50V 5%CAP 0805 SMT X7R	C154	10N 50V 5%CAP 1206 SMT NPO	D24	B160-E3 60V 1A0 SCH D0214AC SMT	R8L	RC847C 0.1A NPN 45V SOT-23 SMT					
C23C	330P 50V 5%CAP 0805 SMT NPO	C77	10U 25V 20%CAP 5X5.4 SMT EL	C155	100N 50V 5%CAP 0805 SMT X7R	D25	RLZ7.5B 7V5 0W5 6% SMT ZEN	R9L	BC847C 0.1A NPN 45V SOT-23 SMT					
C24A	82N 100V 10%CAP 0805 SMT X7R	C78	1N5 50V 5%CAP 0805 SMT NPO	C156	100N 50V 5%CAP 0805 SMT X7R	D26	SMMSZ5230B 4V7 0W5 SOD123 SMT ZEN	R10L	MMBT3906LT1 PNPN SOT-23 SMT T&R					
C24B	82N 100V 10%CAP 0805 SMT X7R	C79	100N 50V 5%CAP 0805 SMT X7R	C157	100N 50V 5%CAP 0805 SMT X7R	D27	MMMSZ5230B 4V7 0W5 SOD123 SMT ZEN	R10L	MMBT3906LT1 PNPN SOT-23 SMT T&R					
C24C	82N 100V 10%CAP 0805 SMT X7R	C80	100N 50V 5%CAP 0805 SMT X7R	C158	100N 50V 5%CAP 0805 SMT X7R	D28	PMLL4148 75V 0A2 SOD80C SMT	R11	NTD20P06L PCH MFET DPAK3 SMT					
C25A	1N5 50V 5%CAP 0805 SMT NPO	C81	100N 50V 5%CAP 0805 SMT X7R	C159	100N 50V 5%CAP 0805 SMT X7R	D29	PMLL4148 75V 0A2 SOD80C SMT	R13	MMBFJ11A NCH JFET SOT-23 SMT					
C25B	1N5 50V 5%CAP 0805 SMT NPO	C82	100N 50V 5%CAP 1206 SMT NPO	C160	22U 16V 5%CAP 5X5.5 SMT ELC	D30	B340 40V 3A SCH SMC SMT	R14	2N7002 NCH FET SOT-23 SMT T&R					
C25C	1N5 50V 5%CAP 0805 SMT NPO	C83	100N 50V 5%CAP 0805 SMT X7R	C161	5229	150N 63V 10%CAP T&R RAD .2FLM	D31	PMLL4148 75V 0A2 SOD80C SMT	R15	MMBT3906LT1 PNPN SOT-23 SMT T&R				
C26A	33N 50V 5%CAP 0805 SMT X7R	C84	10U 25V 20%CAP 5X5.4 SMT EL	C162	5229	150N 63V 10%CAP T&R RAD .2FLM	D32A	PMLL4148 75V 0A2 SOD80C SMT	R17	TCM809S RESET SENSE SMT SOT23B				
C26B	33N 50V 5%CAP 0805 SMT X7R	C85	100N 50V 5%CAP 0805 SMT X7R	C163	150N 25V 10%CAP 0603 SMT X7R	D32B	PMLL4148 75V 0A2 SOD80C SMT	R18	TCM809S RESET SENSE SMT SOT23B					
C26C	33N 50V 5%CAP 0805 SMT X7R	C86	10U 25V 20%CAP 5X5.4 SMT EL	C164	150N 25V 10%CAP 0603 SMT X7R	D32C	PMLL4148 75V 0A2 SOD80C SMT	R19	TC78M05BDTR POS REG SMT DPAK3					
C27A	22U 16V 5%CAP 5X5.5 SMT ELC	C87	22P 50V 5%CAP 0805 SMT NPO	C165	150N 25V 10%CAP 0603 SMT X7R	D33	PMLL4148 75V 0A2 SOD80C SMT	R28	BC847C 0.1A NPN 45V SOT-23 SMT					
C27B	22U 16V 5%CAP 5X5.5 SMT ELC	C88	22P 50V 5%CAP 0805 SMT NPO	C166	150N 25V 10%CAP 0603 SMT X7R	D34	PMLL4148 75V 0A2 SOD80C SMT	R29	FDN5618 PCH MFET SOT-23 SMT					
C27C	22U 16V 5%CAP 5X5.5 SMT ELC	C89	100N 50V 5%CAP 0805 SMT X7R	C167	150P 50V 5%CAP 0805 SMT NPO	D35	PMLL4148 75V 0A2 SOD80C SMT	R30	2N7002 NCH FET SOT-23 SMT T&R					
C28A	1N5 50V 5%CAP 0805 SMT NPO	C90	10U 25V 20%CAP 5X5.4 SMT EL	C168	5226	68N 100V 5%CAP 0805 SMT X7R	D36	PMLL4148 75V 0A2 SOD80C SMT	R31	BC847C 0.1A NPN 45V SOT-23 SMT				
C28B	1N5 50V 5%CAP 0805 SMT NPO	C91	10U 25V 20%CAP 5X5.4 SMT EL	C169	100N 50V 5%CAP 0805 SMT X7R	D37	PMLL4148 75V 0A2 SOD80C SMT	R32	TL431A 3 TER ADJ VREG SMT SOT-23 SMT					
C28C	1N5 50V 5%CAP 0805 SMT NPO	C93	10P 50V 10%CAP 0805 SMT NPO	C170A	100N 50V 5%CAP 0805 SMT X7R	D38	MMMSZ5230B 4V7 0W5 SOD123 SMT ZEN	R33	BC847C 0.1A NPN 45V SOT-23 SMT					
C29A	10U 25V 20%CAP 5X5.4 SMT EL	C94	1U 50V 20%CAP 3.3MM SMT ELE	C170B	100N 50V 5%CAP 0805 SMT X7R	D39	PMLL4148 75V 0A2 SOD80C SMT	R34	BSC060PD03NS3EGATMA1 PFE1 PG-PG-TDSN-8					
C29B	10U 25V 20%CAP 5X5.4 SMT EL	C95	100N 100V 10%CAP 1206 SMT X7R	C170C	100N 50V 5%CAP 0805 SMT X7R	D40	PMLL4148 75V 0A2 SOD80C SMT	R37	BC847C 0.1A NPN 45V SOT-23 SMT					
C29C	10U 25V 20%CAP 5X5.4 SMT EL	C96	100N 50V 5%CAP 0805 SMT X7R	C171	10N 50V 5%CAP 1206 SMT NPO	D41	PMLL4148 75V 0A2 SOD80C SMT	R38	MMBT3906LT1 PNPN SOT-23 SMT T&R					
C30A	82N 100V 10%CAP 0805 SMT X7R	C97	100N 50V 5%CAP 0805 SMT X7R	C172	100N 50V 5%CAP 0805 SMT X7R	D42	PMLL4148 75V 0A2 SOD80C SMT	R1A	W100 1K0 1% 0805 SMT RES					
C30B	82N 100V 10%CAP 0805 SMT X7R	C98	100N 50V 5%CAP 0805 SMT X7R	C173	100N 50V 5%CAP 0805 SMT X7R	D43	RLZ7.5B 7V5 0W5 6% SMT ZEN	R1B	W100 1K0 1% 0805 SMT RES					
C30C	82N 100V 10%CAP 0805 SMT X7R	C99	100N 50V 5%CAP 0805 SMT X7R	C174	100N 50V 5%CAP 0805 SMT X7R	D44	PMLL4148 75V 0A2 SOD80C SMT	R1C	W100 1K0 1% 0805 SMT RES					
C31A	100N 50V 5%CAP 0805 SMT X7R	C100	100N 50V 5%CAP 0805 SMT X7R	C175	10U 25V 20%CAP 5X5.4 SMT EL	D45	PMLL4148 75V 0A2 SOD80C SMT	R2	W100 4K99 1% 0805 SMT RES					
C31B	100N 50V 5%CAP 0805 SMT X7R	C101	100N 50V 5%CAP 0805 SMT X7R	C176	100N 50V 5%CAP 0805 SMT X7R	D46	SMBJS339B 5V6 5W0 DO214AA SMT ZEN	R3	W100 4K99 1% 0805 SMT RES					
C31C	100N 50V 5%CAP 0805 SMT X7R	C102	100N 100V 10%CAP 1206 SMT X7R	C177	100N 50V 5%CAP 0805 SMT X7R	D47	MMBZ5227B 3V6 0W35 5% SMT ZEN	R4	W125 10R 1% 0805 SMT RES					
C32A	100N 50V 5%CAP 0805 SMT X7R	C103	150N 25V 10%CAP 0603 SMT X7R	C178	680U 6V3 20%CAP 8X10 SMT ELE	D48	PMLL4148 75V 0A2 SOD80C SMT	R6	W100 4K99 1% 0805 SMT RES					
C32B	100N 50V 5%CAP 0805 SMT X7R	C104	1U 50V 20%CAP 3.3MM SMT ELE	C179	1U 100V 10%CAP 1206 SMT X7R	D50	PMLL4148 75V 0A2 SOD80C SMT	R7	W100 4K99 1% 0805 SMT RES					
C32C	100N 50V 5%CAP 0805 SMT X7R	C105	1U 50V 20%CAP 3.3MM SMT ELE	C180	100N 100V 10%CAP 1206 SMT X7R	F1	2494	FUSE 5A0 250V TIME DELAY T&R	R8	W100 4K99 1% 0805 SMT RES				
C33	270P 50V 5%CAP 0805 SMT NPO	C106	1U 50V 20%CAP 3.3MM SMT ELE	C181	100N 50V 5%CAP 0805 SMT X7R	H51	6898 HEATSLINK TPA116D2 W30X5L1X28 ALUM	R9	W100 4K99 1% 0805 SMT RES					
C34	1N 50V 5%CAP 0805 SMT NPO	C107	100U 25V 20%CAP 8X4.5 SMT ELE	C182	100N 50V 5%CAP 0805 SMT X7R	H91	GAPPAD GR25A 2.0MM 14X11MM	R10	W100 4K99 1% 0805 SMT RES					
C35	10U 25V 20%CAP 5X5.4 SMT EL	C108	1U 50V 20%CAP 3.3MM SMT ELE	C183	100N 50V 5%CAP 0805 SMT X7R	H99	8807 6-32X9/10 PAN PH MS JS500	R11	W100 4K99 1% 0805 SMT RES					
C36	1N 50V 5%CAP 0805 SMT NPO	C109	100N 50V 5%CAP 0805 SMT X7R	C184	1U 50V 20%CAP 3.3MM SMT ELE	H100	8807 6-32X9/10 PAN PH MS JS500	R14	W125 22K 5% 0805 SMT RES					
C37H	270P 50V 5%CAP 0805 SMT NPO	C111	2N240V 5%CAP T&R RAD .2FLM	C185	100N 50V 5%CAP 0805 SMT X7R	J1	4154 /148XL PCB MT VERT ACJC6AV2L	R15	W100 4K99 1% 0805 SMT RES					
C37L	270P 50V 5%CAP 0805 SMT NPO	C120	2N240V 5%CAP T&R RAD .2FLM	C186	10P 100V 10%CAP 0805 SMT NPO	J2	4152 /148+SW/XLR PCB MT VERT ACJC9AV2L	R16	W125 47K5 1% 0805 SMT RES					
C38	100N 50V 5%CAP 0805 SMT X7R	C113	1N 50V 5%CAP 0805 SMT NPO	C187	4U7 25V 20%CAP 4X5									

M1914 02 P2 Parts Reference List 11/27/2020

REF	YS #	Description	REF	YS #	Description	REF	YS #	Description	REF	YS #	Description	REF	YS #	Description
R31C		W100 1K0 1% 0805 SMT RES	R66A		W100 4K99 1% 0805 SMT RES	R118		W125 64K9 1% 0805 SMT RES	R198		W125 1K21 1% 0805 SMT RES	R294		W125 47K5 1% 0805 SMT RES
R32		W125 562R0 1% 0805 SMT RES	R66B		W100 4K99 1% 0805 SMT RES	R118H		W100 10M 1% 0805 SMT RES	R199		W125 5K76 1% 0805 SMT RES	R295		W125 4M7 5% 0805 SMT RES
R33A		W100 10K0 1% 0805 SMT RES	R66C		W100 4K99 1% 0805 SMT RES	R118L		W100 10M 1% 0805 SMT RES	R200		W100 1K0 1% 0805 SMT RES	R296		W125 3K32 1% 0805 SMT RES
R33B		W100 10K0 1% 0805 SMT RES	R68		W100 47K5 1% 0805 SMT RES	R119		W100 10K0 1% 0805 SMT RES	R202		W100 10K0 1% 0805 SMT RES	R297		W100 39R 5% 0805 SMT RES
R33C		W100 10K0 1% 0805 SMT RES	R69		W125 1K21 1% 0805 SMT RES	R119H		W100 15K0 1% 0805 SMT RES	R203		W100 2K0 1% 0805 SMT RES	R298		W100 6K98 1% 0805 SMT RES
R34A		W125 249R0 1% 0805 SMT RES	R70		W100 1K0 1% 0805 SMT RES	R119L		W100 15K0 1% 0805 SMT RES	R204		W100 1M0 1% 0805 SMT RES	R299		W100 2K0 1% 0805 SMT RES
R34B		W125 249R0 1% 0805 SMT RES	R71		W125 3K92 1% 0805 SMT RES	R120		W125 0R 5% 0805 SMT RES	R205		W100 27K4 1% 0805 SMT RES	R300		W100 10K0 1% 0805 SMT RES
R35A		W125 120K 1% 0805 SMT RES	R72		W100 4K99 1% 0805 SMT RES	R120L		W125 8K25 1% 0805 SMT RES	R208		W125 249R0 1% 0805 SMT RES	R301		W100 100R 1% 0805 SMT RES
R35B		W125 120K 1% 0805 SMT RES	R73		W125 22K 5% 0805 SMT RES	R121		W125 10R 1% 0805 SMT RES	R209		W125 5K76 1% 0805 SMT RES	R302		W100 10K0 1% 0805 SMT RES
R36		W100 100K0 1% 0805 SMT RES	R74		W125 3K92 1% 0805 SMT RES	R122		W125 64K9 1% 0805 SMT RES	R210		W100 10K0 1% 0805 SMT RES	R303		W100 10M 1% 0805 SMT RES
R37A		W125 249R0 1% 0805 SMT RES	R75		W100 1K0 1% 0805 SMT RES	R123		W125 3K92 1% 0805 SMT RES	R212		W100 39R 5% 0805 SMT RES	R304		W125 562R0 1% 0805 SMT RES
R37B		W125 249R0 1% 0805 SMT RES	R76		W125 82K5 1% 0805 SMT RES	R124		W125 10R 1% 0805 SMT RES	R213		W100 100R 1% 0805 SMT RES	R305		W100 100R 1% 0805 SMT RES
R38A		W100 4K99 1% 0805 SMT RES	R77		W125 3K92 1% 0805 SMT RES	R125		W125 10R 1% 0805 SMT RES	R215		W100 100K0 1% 0805 SMT RES	R306		W100 10M 1% 0805 SMT RES
R38B		W100 4K99 1% 0805 SMT RES	R78		W125 3K92 1% 0805 SMT RES	R126		W125 5K76 1% 0805 SMT RES	R217		W125 1K21 1% 0805 SMT RES	R307		W100 100K0 1% 0805 SMT RES
R39A		W100 10M 1% 0805 SMT RES	R79		W125 0R 5% 0805 SMT RES	R127		W500 3R3 5% 1210 SMT RES	R218		W100 10K0 1% 0805 SMT RES	R308		W100 1M0 1% 0805 SMT RES
R39B		W100 10M 1% 0805 SMT RES	R80		W100 10K0 1% 0805 SMT RES	R128		W500 3R3 5% 1210 SMT RES	R220		W100 2K0 1% 0805 SMT RES	R309		W100 1M0 1% 0805 SMT RES
R40A		W125 47K5 1% 0805 SMT RES	R81		W125 249R0 1% 0805 SMT RES	R129		W500 3R3 5% 1210 SMT RES	R221		W100 47K5 1% 0805 SMT RES	R310		W100 1M0 1% 0805 SMT RES
R40B		W125 47K5 1% 0805 SMT RES	R82		W100 4K99 1% 0805 SMT RES	R130		W500 3R3 5% 1210 SMT RES	R222		W100 4K99 1% 0805 SMT RES	R311		W100 1M0 1% 0805 SMT RES
R41A		W100 1K0 1% 0805 SMT RES	R83A		W125 8K25 1% 0805 SMT RES	R131		W125 10R 1% 0805 SMT RES	R223		W100 4K99 1% 0805 SMT RES	R312		W100 10K0 1% 0805 SMT RES
R41B		W100 1K0 1% 0805 SMT RES	R83B		W125 8K25 1% 0805 SMT RES	R132		W100 1K0 1% 0805 SMT RES	R224		W125 47K5 1% 0805 SMT RES	R315		W100 10K0 1% 0805 SMT RES
R41C		W100 1K0 1% 0805 SMT RES	R83C		W125 8K25 1% 0805 SMT RES	R133		W750 0R1 5% 2010 SMT TR	R225		W125 47K5 1% 0805 SMT RES	R316		W100 10K0 1% 0805 SMT RES
R42A		W100 4K75 1% 0805 SMT RES	R84		W100 4K99 1% 0805 SMT RES	R134		W125 3K92 1% 0805 SMT RES	R227		W100 27K4 1% 0805 SMT RES	R317		W100 100K0 1% 0805 SMT RES
R42B		W100 4K75 1% 0805 SMT RES	R85		W100 1K0 1% 0805 SMT RES	R135		W125 3K32 1% 0805 SMT RES	R228		W100 2K74 1% 0805 SMT RES	R318		W100 10K0 1% 0805 SMT RES
R42C		W100 4K75 1% 0805 SMT RES	R86		W100 1K0 1% 0805 SMT RES	R136		W100 1K0 1% 0805 SMT RES	R229		W125 47K5 1% 0805 SMT RES	R319		W100 10K0 1% 0805 SMT RES
R43A		W100 2K0 1% 0805 SMT RES	R87		W100 10K0 1% 0805 SMT RES	R137		W100 1K0 1% 0805 SMT RES	R230		W100 10K0 1% 0805 SMT RES	R320		W100 47K5 1% 0805 SMT RES
R43B		W100 2K0 1% 0805 SMT RES	R88		W100 4K99 1% 0805 SMT RES	R138		W100 100K0 1% 0805 SMT RES	R231		W125 120K 1% 0805 SMT RES	R321		W125 47K5 1% 0805 SMT RES
R43C		W100 2K0 1% 0805 SMT RES	R89		W125 33K0 5% 0805 SMT RES	R140		W125 4M7 5% 0805 SMT RES	R233		W100 1K0 1% 0805 SMT RES	R322		W100 100K0 1% 0805 SMT RES
R45A		W100 10K0 1% 0805 SMT RES	R91		W100 1M0 1% 0805 SMT RES	R141		W125 3K92 1% 0805 SMT RES	R234		W100 100K0 1% 0805 SMT RES	R323		W100 100K0 1% 0805 SMT RES
R45B		W100 10K0 1% 0805 SMT RES	R94		W100 100K0 1% 0805 SMT RES	R142		W125 120R 1% 0805 SMT RES	R237		W100 1M0 1% 0805 SMT RES	R325		W100 47K5 1% 0805 SMT RES
R45C		W100 10K0 1% 0805 SMT RES	R95		W100 4K99 1% 0805 SMT RES	R143		W250 2R4 5% 1206 SMT RES	R238		W125 11K0 1% 0805 SMT RES	R326		W100 1M0 1% 0805 SMT RES
R46A		W125 249R0 1% 0805 SMT RES	R96		W100 100K0 1% 0805 SMT RES	R144		W250 2R4 5% 1206 SMT RES	R239A		W100 100K0 1% 0805 SMT RES	R327		W100 1M0 1% 0805 SMT RES
R46B		W125 249R0 1% 0805 SMT RES	R97		W100 27K4 1% 0805 SMT RES	R145		W100 1K0 1% 0805 SMT RES	R239B		W100 100K0 1% 0805 SMT RES	R328		W100 1M0 1% 0805 SMT RES
R46C		W125 249R0 1% 0805 SMT RES	R98		W100 100K0 1% 0805 SMT RES	R146		W100 100K0 1% 0805 SMT RES	R239C		W100 100K0 1% 0805 SMT RES	R329		W100 1M0 1% 0805 SMT RES
R47A		W125 562R0 1% 0805 SMT RES	R100		W100 10K0 1% 0805 SMT RES	R147		W125 1K21 1% 0805 SMT RES	R240		W125 4M7 5% 0805 SMT RES	R330		W100 20K5 1% 0805 SMT RES
R47B		W125 562R0 1% 0805 SMT RES	R101L		W100 4K32 1% 0805 SMT RES	R148		W250 1R 5% 1206 SMT RES	R241		W100 100R 1% 0805 SMT RES	R331		W100 1K0 1% 0805 SMT RES
R47C		W125 562R0 1% 0805 SMT RES	R102		W100 100K0 1% 0805 SMT RES	R149		W250 1R 5% 1206 SMT RES	R242		W100 100K0 1% 0805 SMT RES	R332		W100 100K0 1% 0805 SMT RES
R48A		W100 4K99 1% 0805 SMT RES	R103		W100 100K0 1% 0805 SMT RES	R150		W125 22K 5% 0805 SMT RES	R243		W100 39R 5% 0805 SMT RES	S1	4189	DP4T NONSHORTING VERT ROT SWT
R48B		W100 4K99 1% 0805 SMT RES	R103H		W125 3K32 1% 0805 SMT RES	R151		W125 200K 1% 0805 SMT RES	R244		W100 4K99 1% 0805 SMT RES	S2	3439	DPDT MINI PC VERT MOMENTARY
R48C		W100 4K99 1% 0805 SMT RES	R103L		W100 6K98 1% 0805 SMT RES	R152		W100 10K0 1% 0805 SMT RES	R245		W100 39R 5% 0805 SMT RES	S3	3522	DPDT MINI PC VERT SNP ALT
R49A		W100 47K5 1% 0805 SMT RES	R104		W100 100R 1% 0805 SMT RES	R153		W100 10K0 1% 0805 SMT RES	R246		W125 47K5 1% 0805 SMT RES	SNL1	8370	1 MIL POLYIMIDE LABEL, 1X .380"
R49B		W100 47K5 1% 0805 SMT RES	R104H		W125 8K25 1% 0805 SMT RES	R154		W125 22K 5% 0805 SMT RES	R247		W100 4K99 1% 0805 SMT RES	U1		LM358D DUAL SS OPAMP_SMT SO-8
R49C		W100 47K5 1% 0805 SMT RES	R104L		W125 8K25 1% 0805 SMT RES	R155		W125 22K 5% 0805 SMT RES	R248		W100 4K99 1% 0805 SMT RES	U2		LM358D DUAL OPAMP_SMT SO-8
R50		W100 47K5 1% 0805 SMT RES	R105		W100 100K0 1% 0805 SMT RES	R156		W100 10K0 1% 0805 SMT RES	R249		W100 100K0 1% 0805 SMT RES	U3		W100 100K0 1% 0805 SMT RES
R51		W100 10K0 1% 0805 SMT RES	R105H		W100 4K75 1% 0805 SMT RES	R157		W125 249R0 1% 0805 SMT RES	R251		W100 47K5 1% 0805 SMT RES	U4		33078 DUAL OPAMP_SMT SO-8
R51C		W100 12K1 1% 0803 SMT RES	R105L		W100 4K75 1% 0805 SMT RES	R158		W100 100K0 1% 0805 SMT RES	R252		W100 10K0 1% 0805 SMT RES	U5		LM393D DUAL COMPARATOR_SMT SO-8
R52		W100 100K0 1% 0805 SMT RES	R106		W100 10K0 1% 0805 SMT RES	R159		W100 1M0 1% 0805 SMT RES	R253		W100 10K0 1% 0805 SMT RES	U6		TLC555 TIMER_SMT SO-IC
R52C		W100 12K1 1% 0803 SMT RES	R106H		W125 47K5 1% 0805 SMT RES	R160		W100 1K0 1% 0805 SMT RES	R254		W100 2K0 1% 0805 SMT RES	U7		LM13700M XCONDUCTANC AMP_SMT IC
R53A		W100 100R 1% 0805 SMT RES	R106L		W125 47K5 1% 0805 SMT RES	R161		W100 1K0 1% 0805 SMT RES	R255		W100 47K5 1% 0805 SMT RES	U8		TPA3116D2DAD ST AMP_TSOP32 IC SMT
R53B		W100 100R 1% 0805 SMT RES	R107		W100 18K2 1% 0805 SMT RES	R162		W100 10K0 1% 0805 SMT RES	R256		W100 22K 5% 0805 SMT RES	U9		V1000 DIG REVERB SMT IC SO16W
R53C		W100 100R 1% 0805 SMT RES	R107H		W100 100K0 1% 0805 SMT RES	R163		W125 4M7 5% 0805 SMT RES	R257		W100 100K0 1% 0805 SMT RES	U10		V4220M STEREO CODEC SMT IC_SSOP28
R54A		W125 8K25 1% 0805 SMT RES	R107L		W125 47K5 1% 0805 SMT RES	R164		W125 22K 5% 0805 SMT RES	R258		W100 100K0 1% 0805 SMT RES	U11		33078 DUAL OPAMP_SMT SO-8
R54B		W125 8K25 1% 0805 SMT RES	R108		W125 3K92 1% 0805 SMT RES	R166		W100 6K98 1% 0805 SMT RES	R259		W100 1K0 1% 0805 SMT RES	U12		33078 DUAL OPAMP_SMT SO-8
R54C		W125 8K25 1% 0805 SMT RES	R108H		W125 562R0 1% 0805 SMT RES	R167		W100 2K74 1% 0805 SMT RES	R260		W100 2K0 1% 0805 SMT RES	U13		33078 DUAL OPAMP_SMT SO-8
R55A		W100 20K5 1% 0805 SMT RES	R108L		W100 2K0 1% 0805 SMT RES	R169		W100 10K0 1% 0805 SMT RES	R261		W100 1K0 1% 0805 SMT RES	U14		33078 DUAL OPAMP_SMT SO-8
R55B		W100 20K5 1% 0805 SMT RES	R109		W100 100K0 1% 0805 SMT RES	R170		W125 47K5 1% 0805 SMT RES	R262		W125 47K5 1% 0805 SMT RES	U15		TL062 DUAL OPAMP_LOPWR_SMT SOIC8
R55C		W125 47K5 1% 0805 SMT RES	R109H		W100 18K2 1% 0805 SMT RES	R171		W100 100K0 1% 0805 SMT RES	R265		W125 562R0 1% 0805 SMT RES	U16		33078 DUAL OPAMP_SMT SO-8
R56A		W125 120K 1% 0805 SMT RES	R109L		W100 18K2 1% 0805 SMT RES	R172		W100 100K0 1% 0805 SMT RES	R267		W125 249R0 1% 0805 SMT RES	U17		BM20 BLUETOOTH AUDIO SMT MOD
R56B		W125 120K 1% 0805 SMT RES	R110		W125 47K5 1% 0805 SMT RES	R174		W125 30K 0.5% 0805 SMT RES	R268		W100 100K0 1% 0805 SMT RES	U18		MC33063ADR BUCK/BOOST INV IC SO8
R57A		W125 249R0 1% 0805 SMT RES	R110H		W100 10K0 1% 0805 SMT RES	R175		W100 1K0 1% 0805 SMT RES	R2					

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9708 Power Supply

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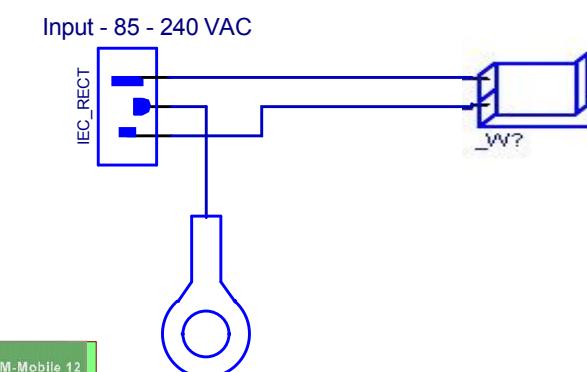
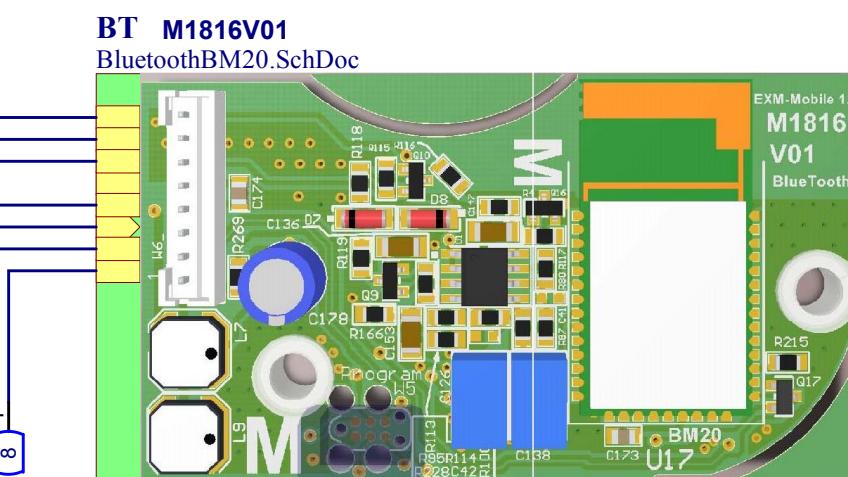
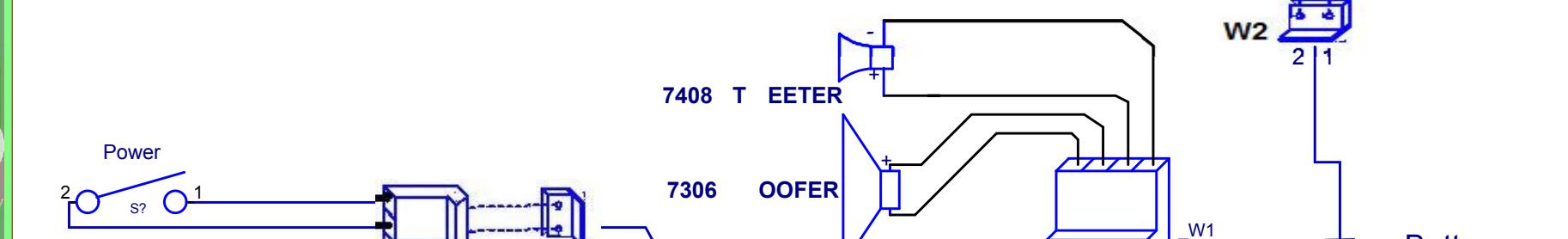
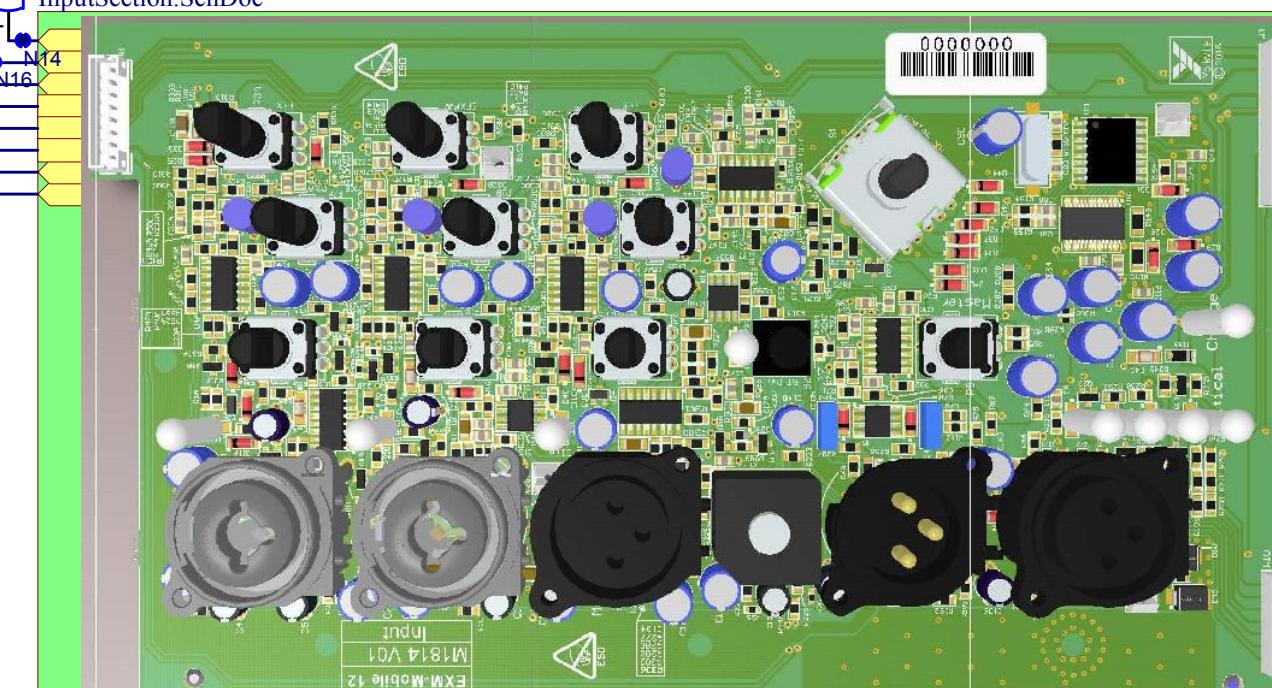
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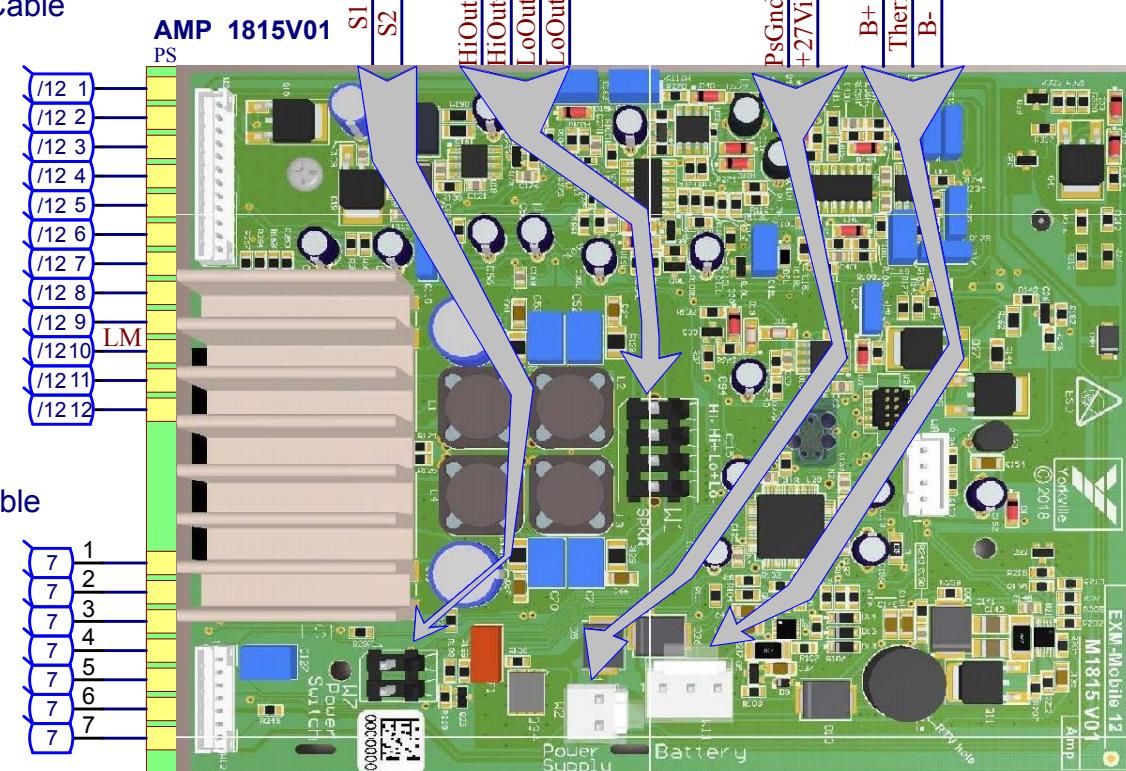
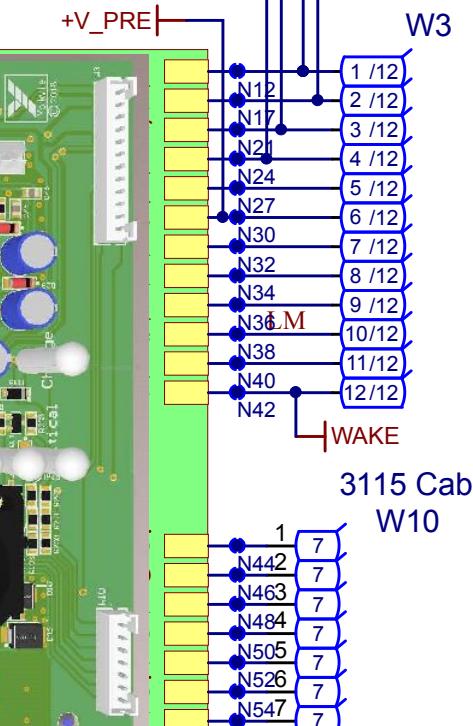
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K

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Legend**Battery System Gnd****3094 Cable****3093 Cable****Input M1814V01**
InputSection.SchDoc

SG
-12V
+5VFX
+5V
3124 Cable
W3



Yorkville Sound Ltd.
550 Granite Court
Pickering, ON
Canada L1W 3Y8
www.yorkville.com

Product(s): EXMMobile12

Description: Battery Powered PA Speaker

PCB#: M1814 **Rev#:** V01 **EML Rev#:** 01

Modified: 2019-09-17 **File:** Top Sheet.SchDoc

Tmp Rev: V031

DESIGN HISTORY

History.SchDoc
Assembly.SchDoc

ECAD INCIDENTAL
ECO.SchDoc

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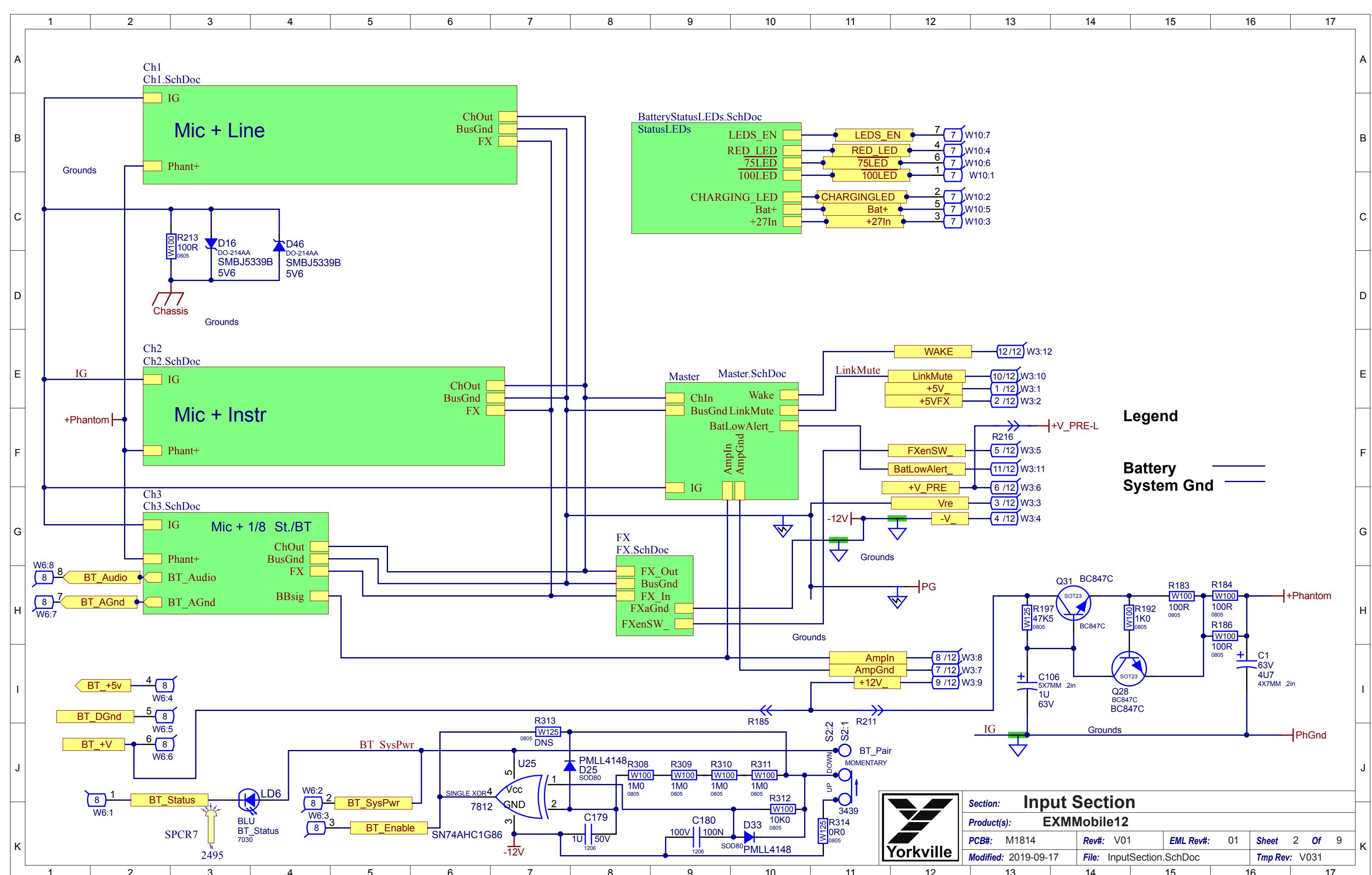
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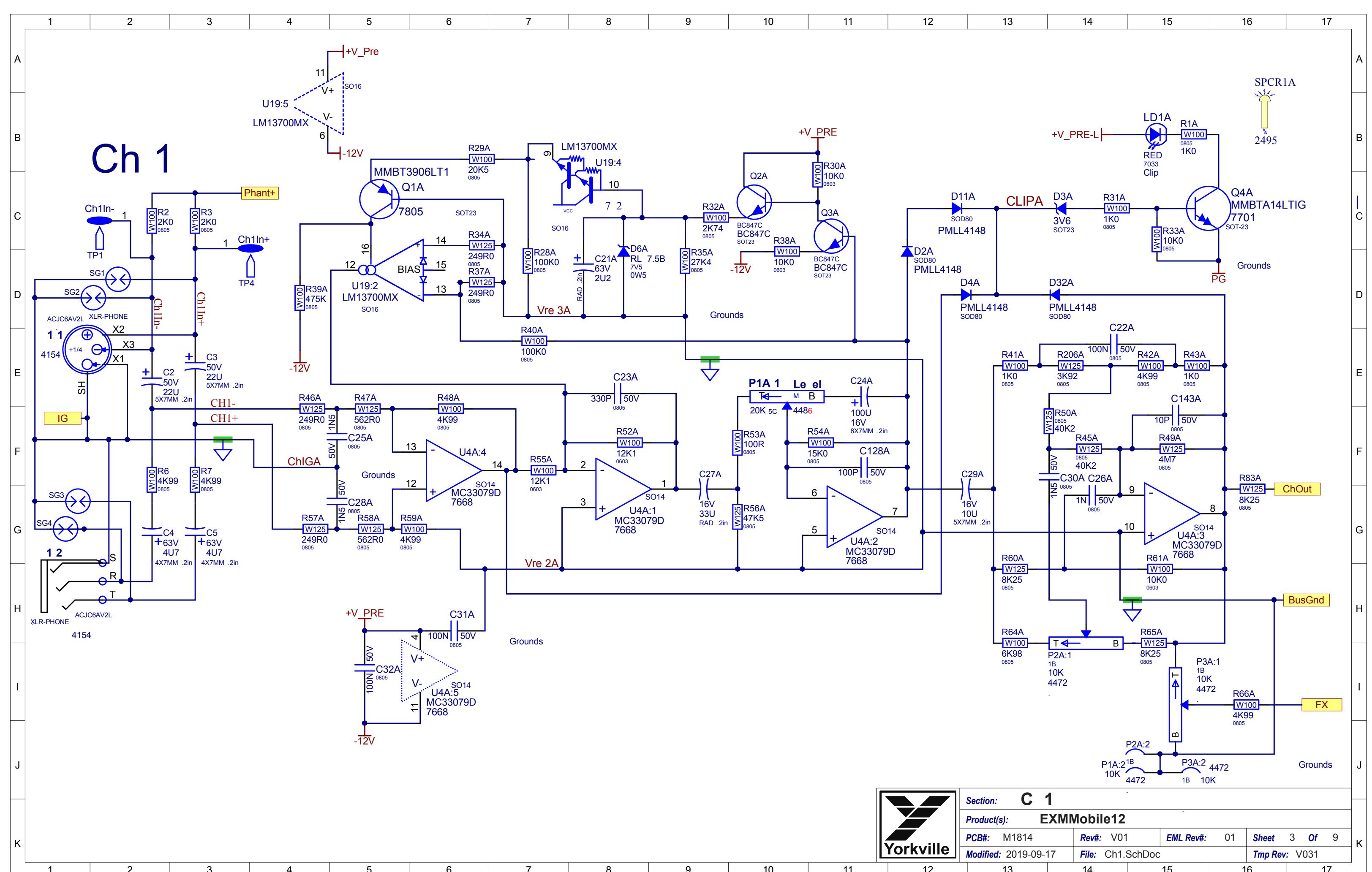
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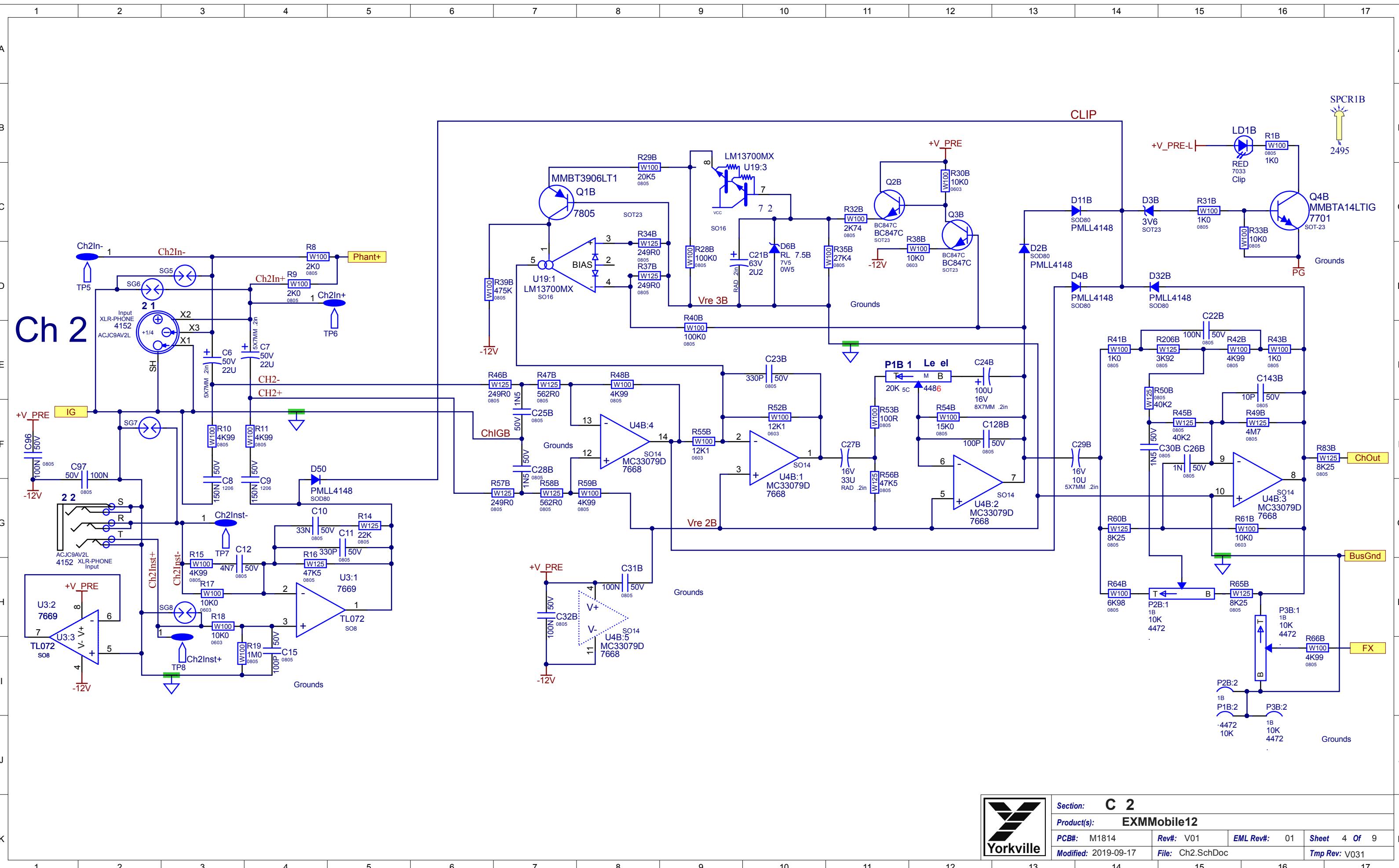
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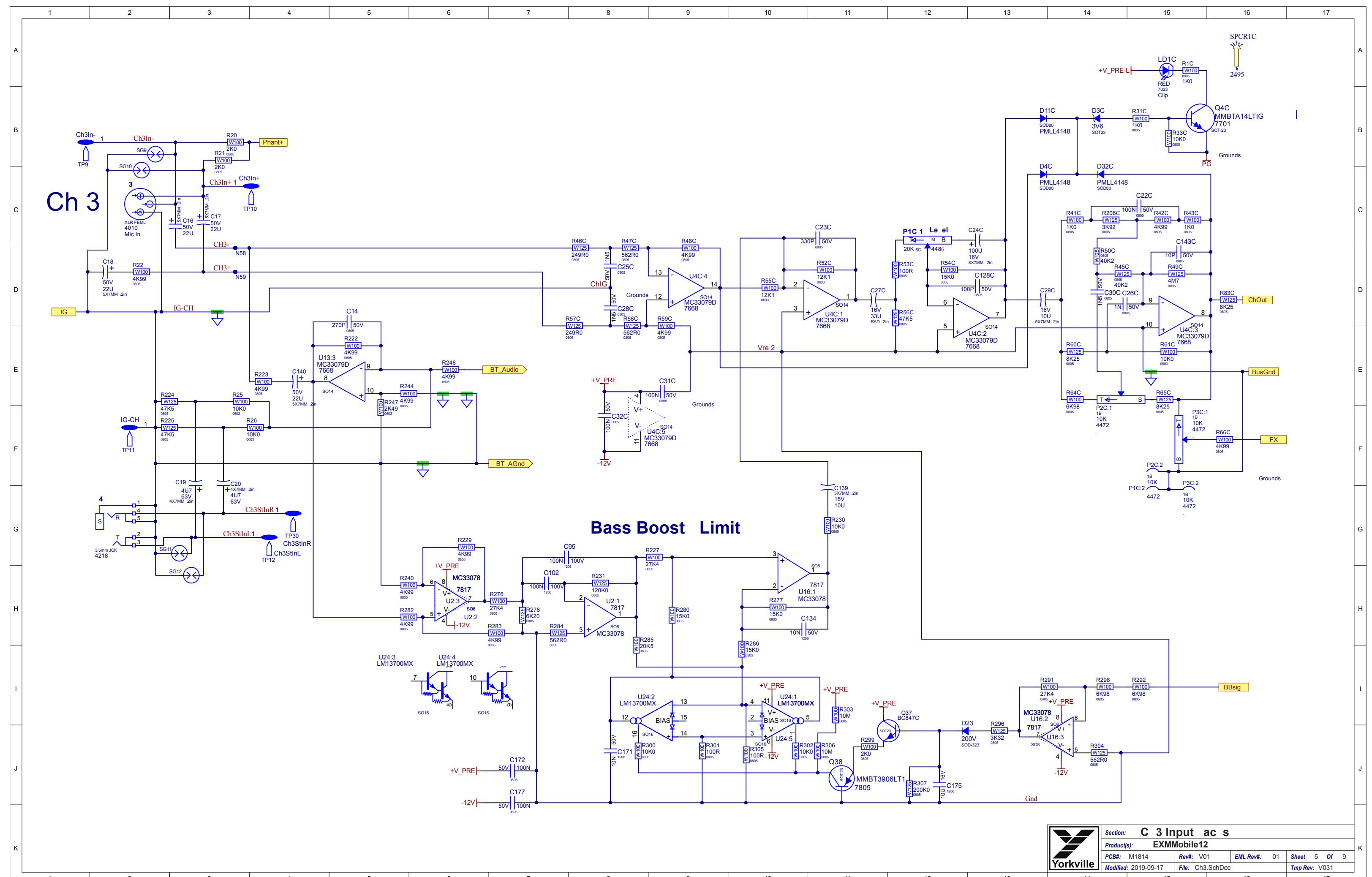
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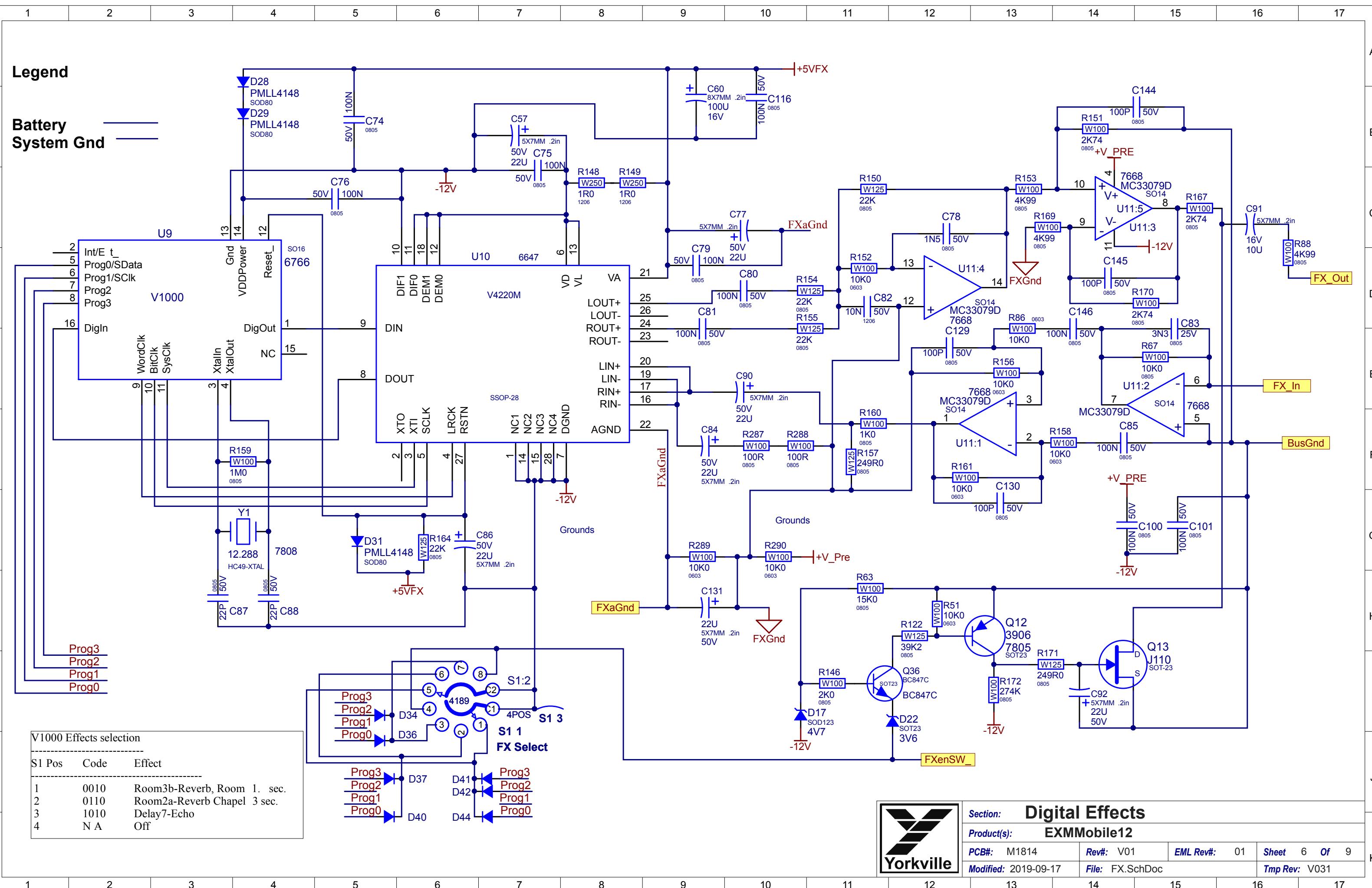
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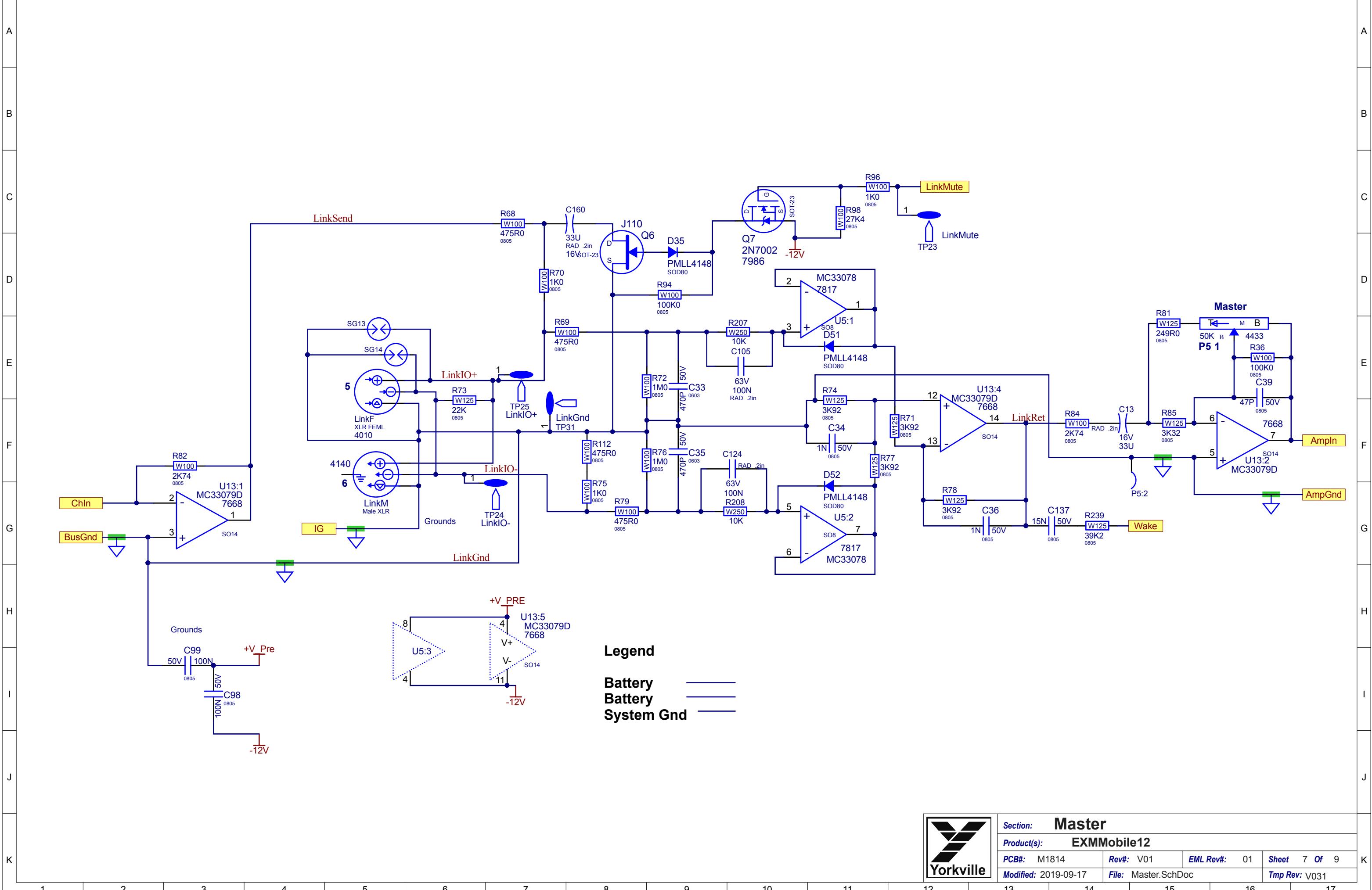


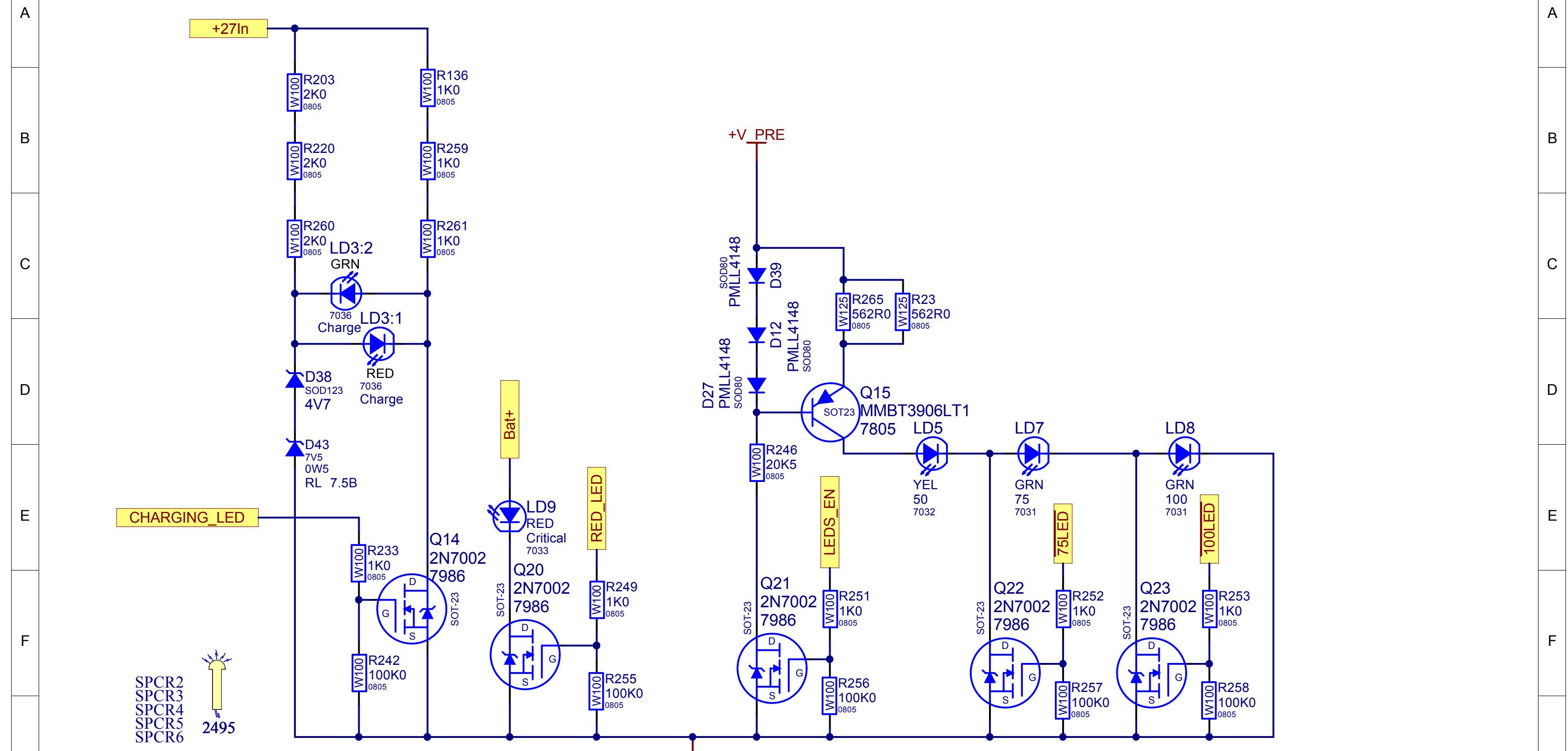






1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17



**Legend**

Battery System Gnd

**Battery Status****Product(s): EXMMobile12****PCB#:** M1814 **Rev#:** V01 **EML Rev#:** 01 **Sheet 8 Of 9****Modified:** 2019-09-17 **File:** BatteryStatusLEDs.SchDoc **Tmp Rev:** V031

DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

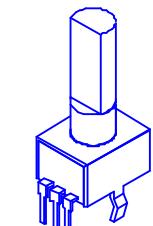
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1	08-JAN-2019	V01	.	RELEASED FOR PRODUCTION
2	17-Sept-2019	.	9437	Change R248 1K21 to 4K99, R244 1K21 to 4K99, R172 82K5 to 274K.
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#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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POTENTIOMETERS AND NOBS

POTENTIOMETERS S ITCHES AND NOBS					
REF	FUNCTION	POT S	YS#	STYLE	NOB#
P1A	LEVEL	4483		P32	10043
P1B	LEVEL	4483		P32	10043
P1C	LEVEL	4483		P32	10043
P2A	Shape	4472		P32	9921
P2B	Shape	4472		P32	9921
P2C	Shape	4472		P32	9921
P3A	FX Send	4472		P32	9921
P3B	FX Send	4472		P32	9921
P3C	FX Send	4472		P32	9921
P4	Master	4433		P32	10043
S1	FX Select	4189			10045
.
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THIS SHEET CONTAINS A CHANGE HISTORY LOG, A LIST OF THE POTS & KNOBS AND A LEADS & PINS REFERENCE SECTION.

EXMMobile12
M1814 V01
Input



ESD

Input
4154

R10

C1

J1

C5

J2

C6

C7

C8

C9

C10

C11

C12

C13

C14

C15

C16

C17

C18

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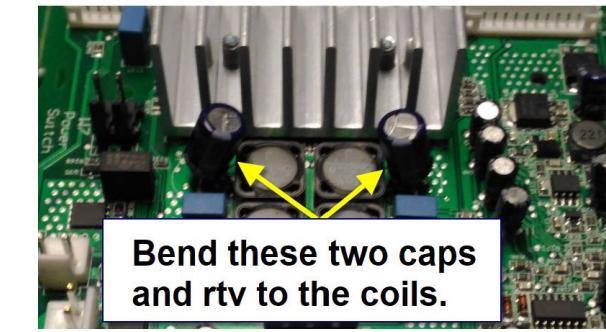
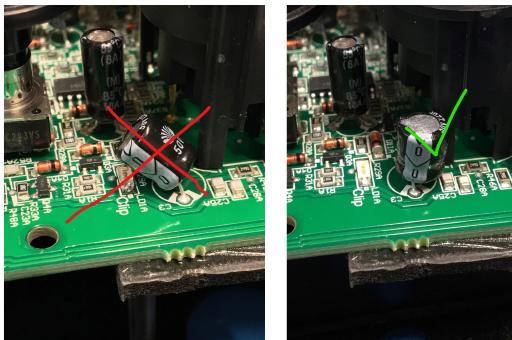
C207

PCB ASSEMBLY DOCUMENTATION

SPECIAL PRODUCTION NOTES

1. RTV ALL TALL CAPS
2. USE PI A CUTTER TO SEPARATE BOARD FROM PANEL.

Please make sure C3 is VERTICAL
and not bent over covering the LED
LD1A



Please make sure C21A C21B C24C are
not bent over covering the LEDs next to them
LD1A LD1B LD1C

THIS SHEET CONTAINS SPECIAL PRODUCTION NOTES AND A LIST OF PCB HARDWARE PARTS REQUIRED FOR THE BUILD.

 Yorkville	Section:	Assembly Documentation		
	Product(s):	EXMMobile12		
	PCB#:	M1814	Rev#:	V01
	Modified:	11/5/2019	EML Rev#:	01
	File:	Assembly.SchDoc	Sheet 10 Of	11
			Tmp Rev:	V031

DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

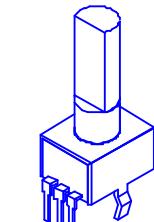
#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	08-JAN-2019	V01	.	RELEASED FOR PRODUCTION
2	17-Sept-2019	.	9437	Change R248 1K21 to 4K99, R244 1K21 to 4K99, R172 82K5 to 274K.
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#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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POTENTIOMETERS AND NOBS

POTENTIOMETERS S ITCHES AND NOBS					
REF	FUNCTION	POT S	YS#	STYLE	NOB#
P1A	LEVEL	4483		P32	10043
P1B	LEVEL	4483		P32	10043
P1C	LEVEL	4483		P32	10043
P2A	Shape	4472		P32	9921
P2B	Shape	4472		P32	9921
P2C	Shape	4472		P32	9921
P3A	FX Send	4472		P32	9921
P3B	FX Send	4472		P32	9921
P3C	FX Send	4472		P32	9921
P4	Master	4433		P32	10043
S1	FX Select	4189			10045
.
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STYLE P32

THIS SHEET CONTAINS A CHANGE HISTORY LOG, A LIST OF THE POTS & KNOBS AND A LEADS & PINS REFERENCE SECTION.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

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A

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J

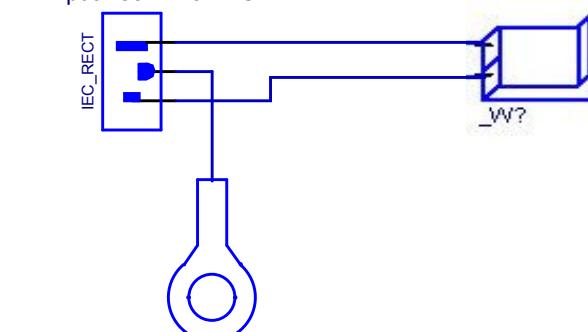
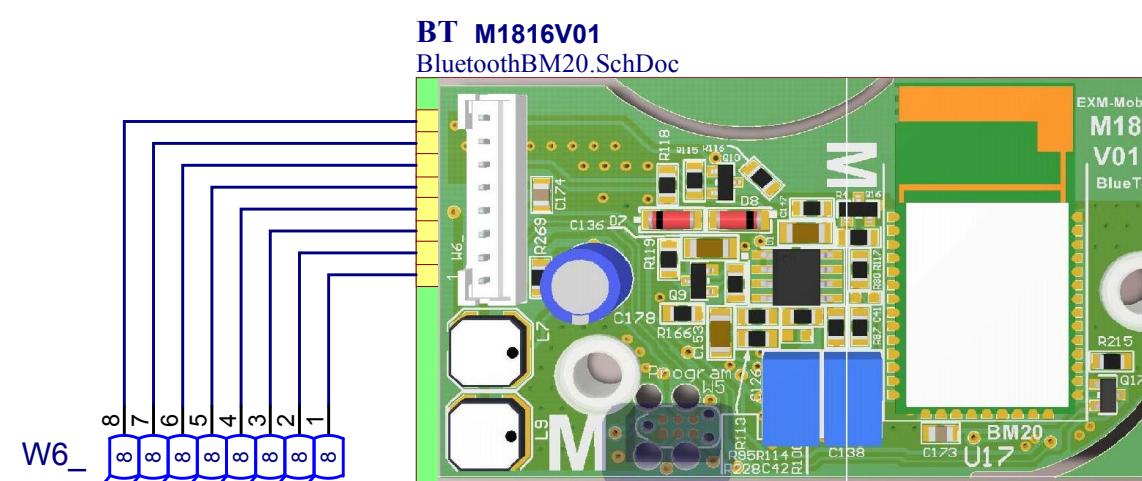
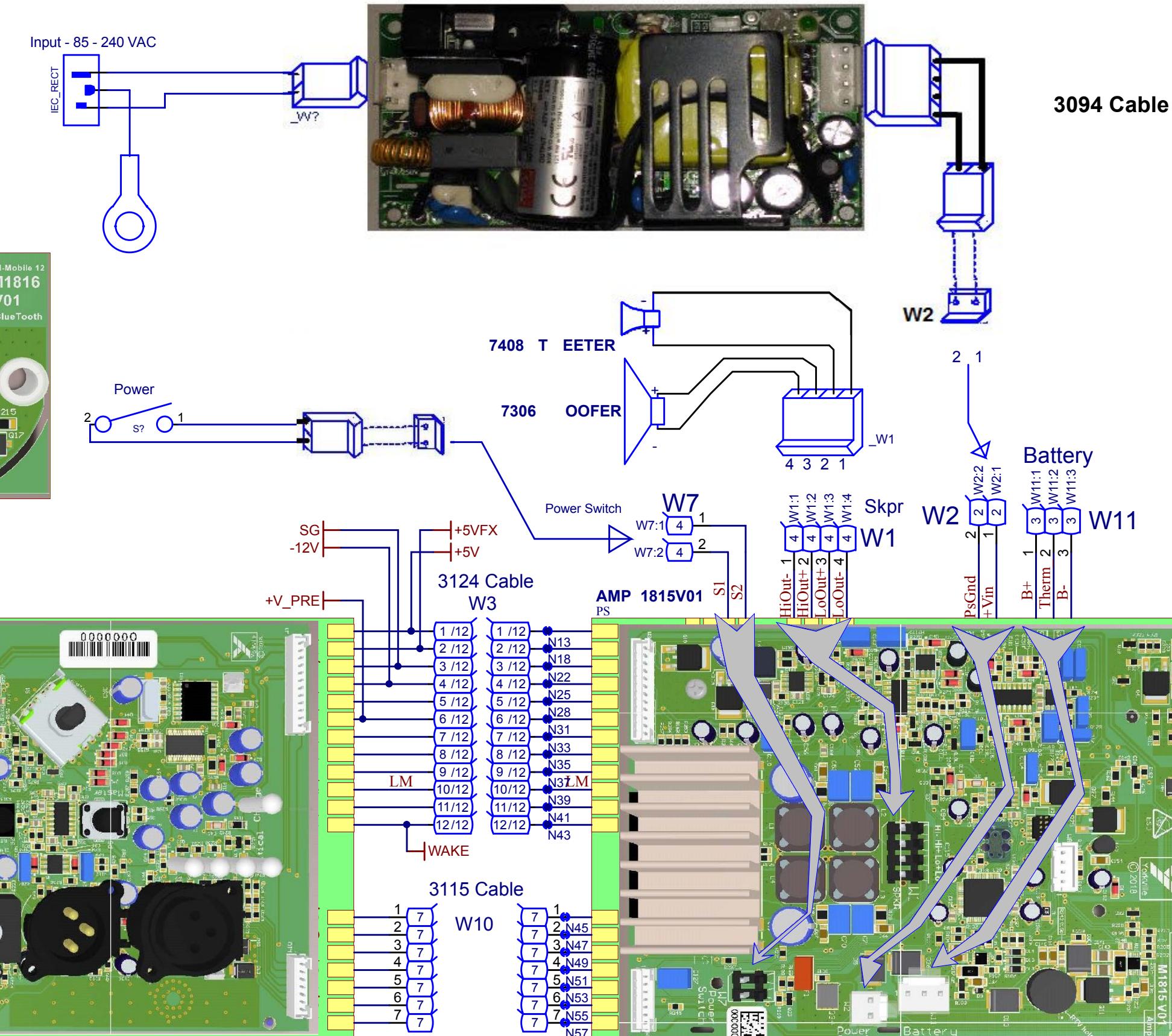
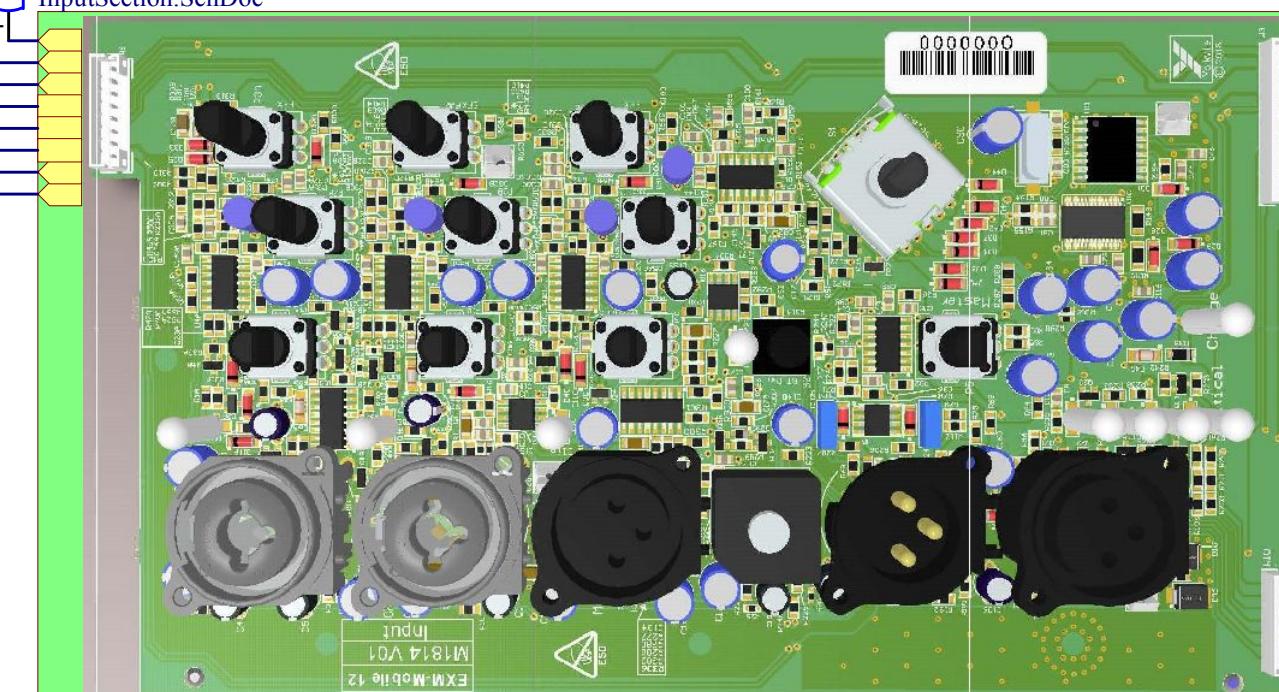
J

K

K

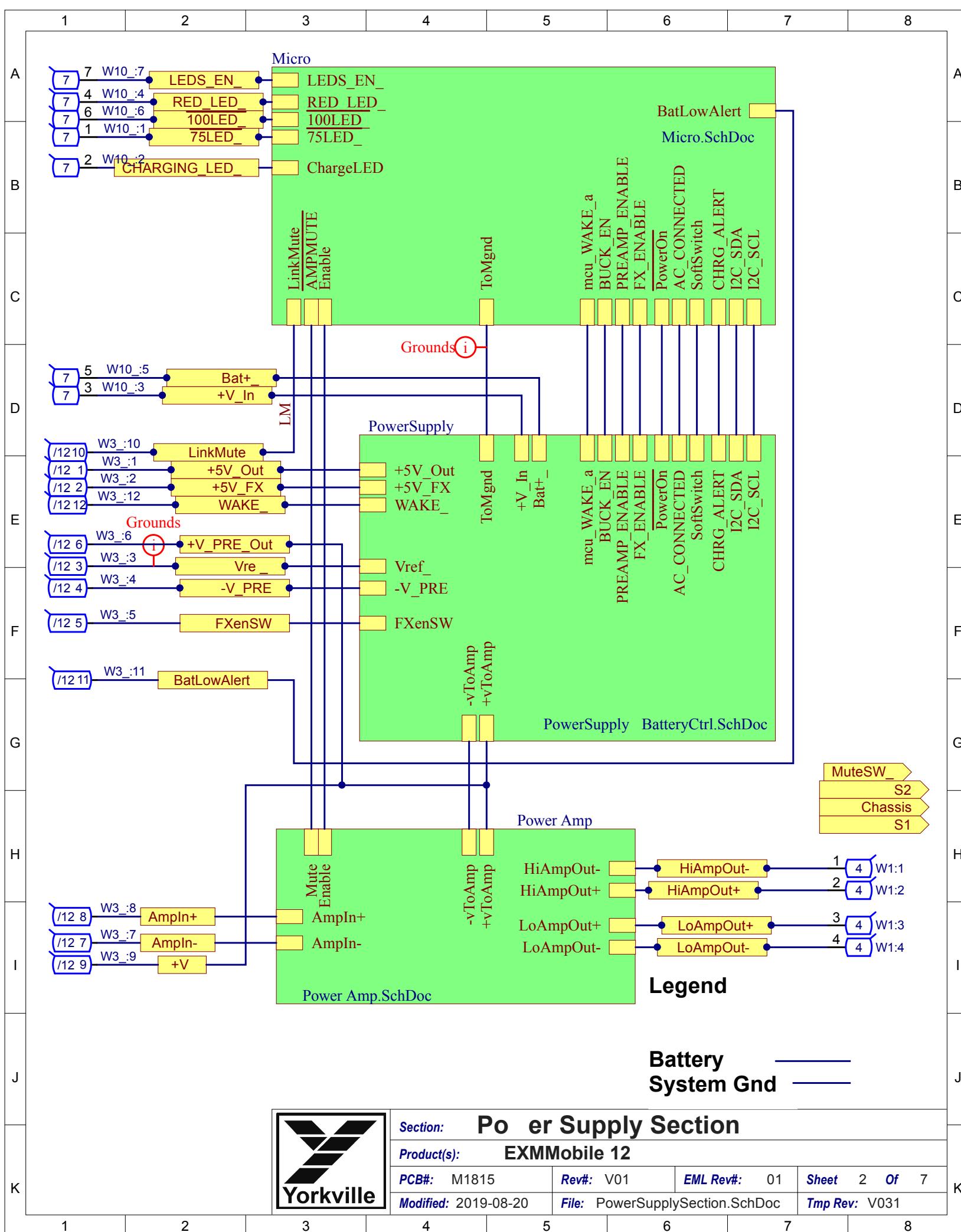
Legend**Battery System Gnd** **9708 Power Supply**

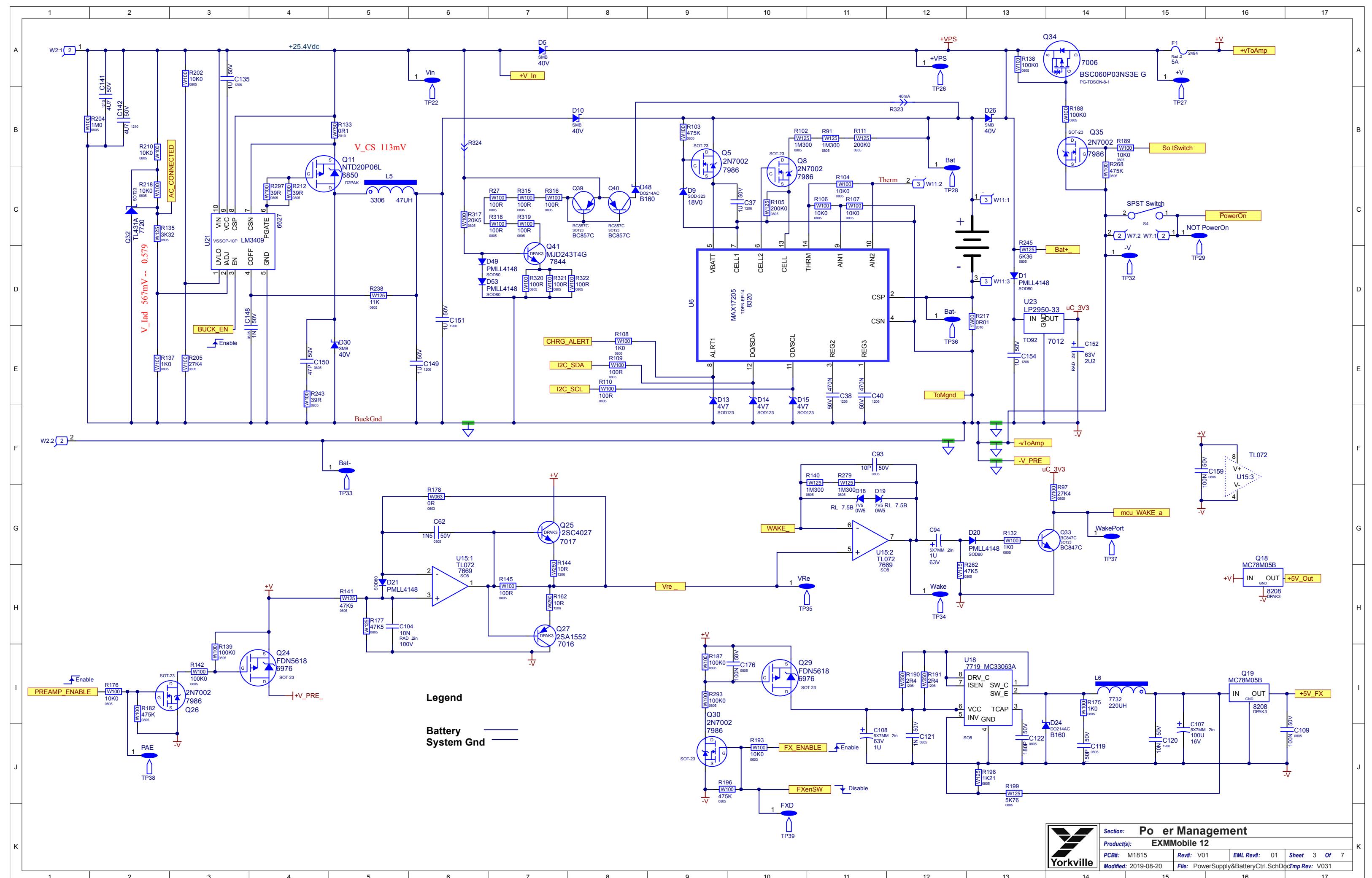
Input - 85 - 240 VAC

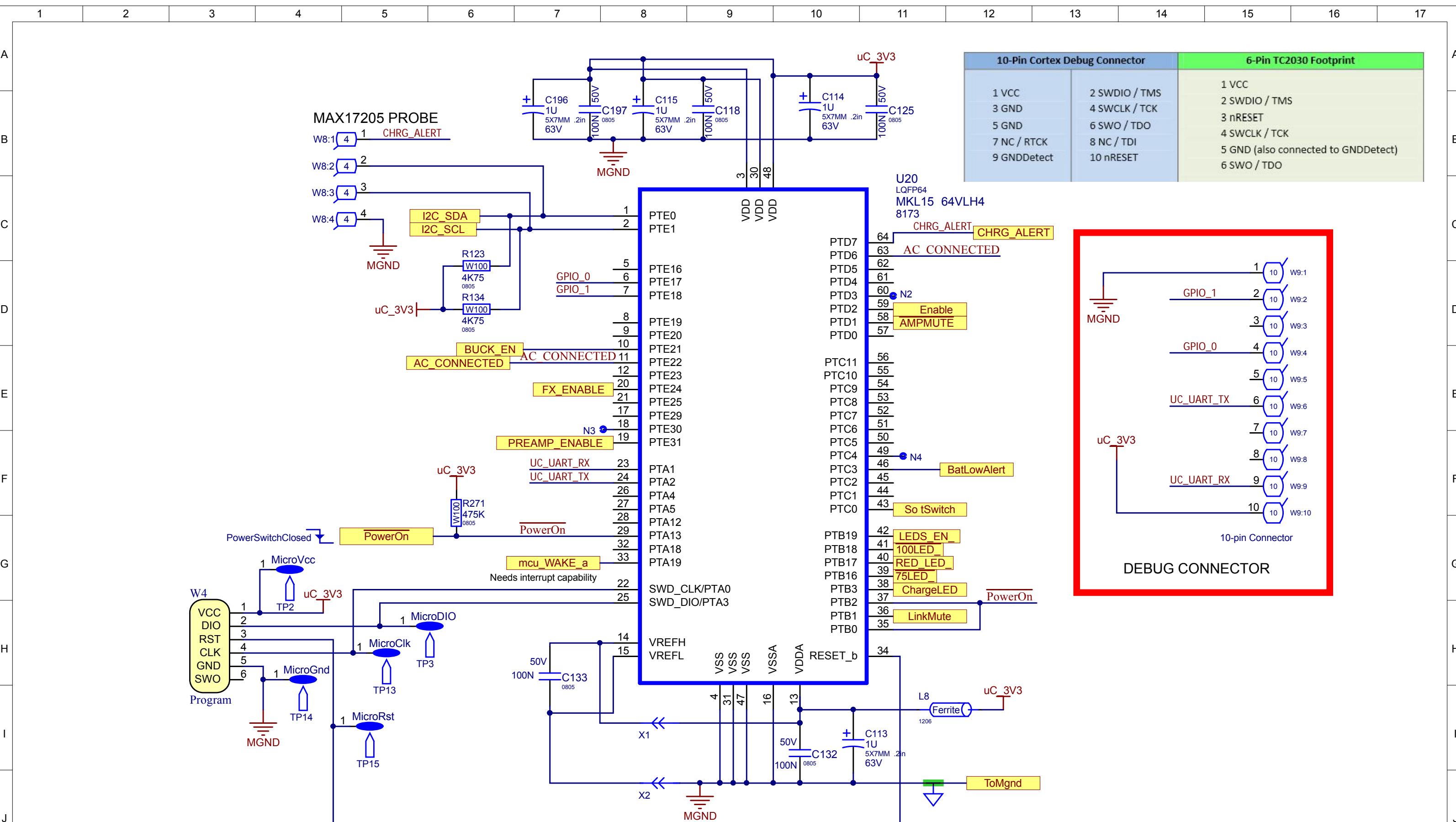
**3094 Cable****3093 Cable****Input M1814V01**
InputSection.SchDoc**DESIGN HISTORY****ASSEMBLY NOTES****ECAD INCIDENTAL
ECO.SchDoc**

Product(s): EXMMobile 12
Description: Battery Powered PA Speaker
PCB#: M1815 **Rev#:** V01 **EML Rev#:** 01 **Sheet:** 1 Of 7
Modified: 2019-08-20 **File:** Top Sheet.SchDoc
Tmp Rev: V031

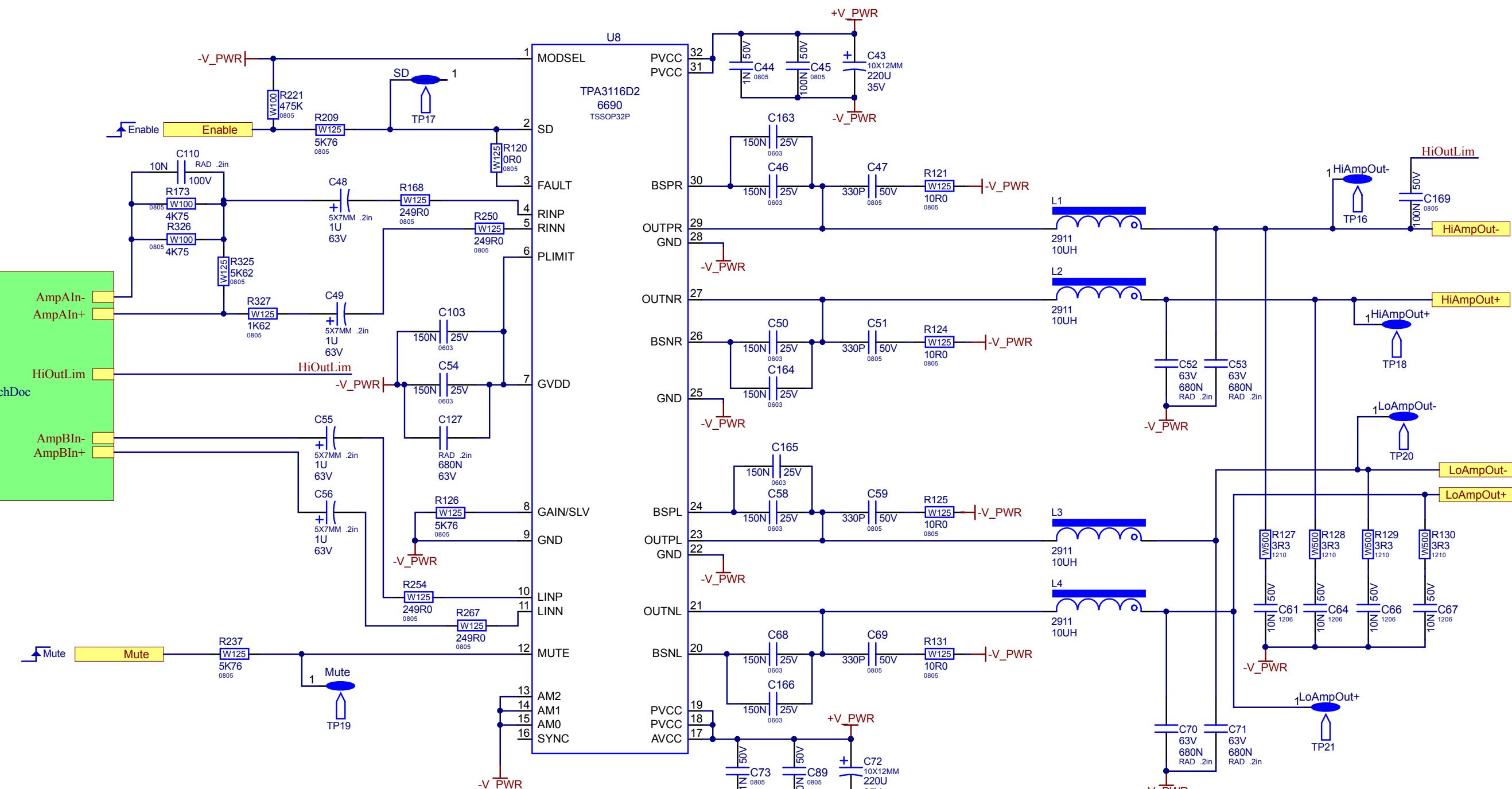
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17





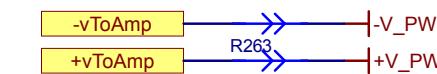


Section: Microcontroller
 Product(s): EXMMobile 12
 PCB#: M1815 Rev#: V01 EML Rev#: 01 Sheet 4 Of 7
 Modified: 2019-08-20 File: Micro.SchDoc Tmp Rev: V031



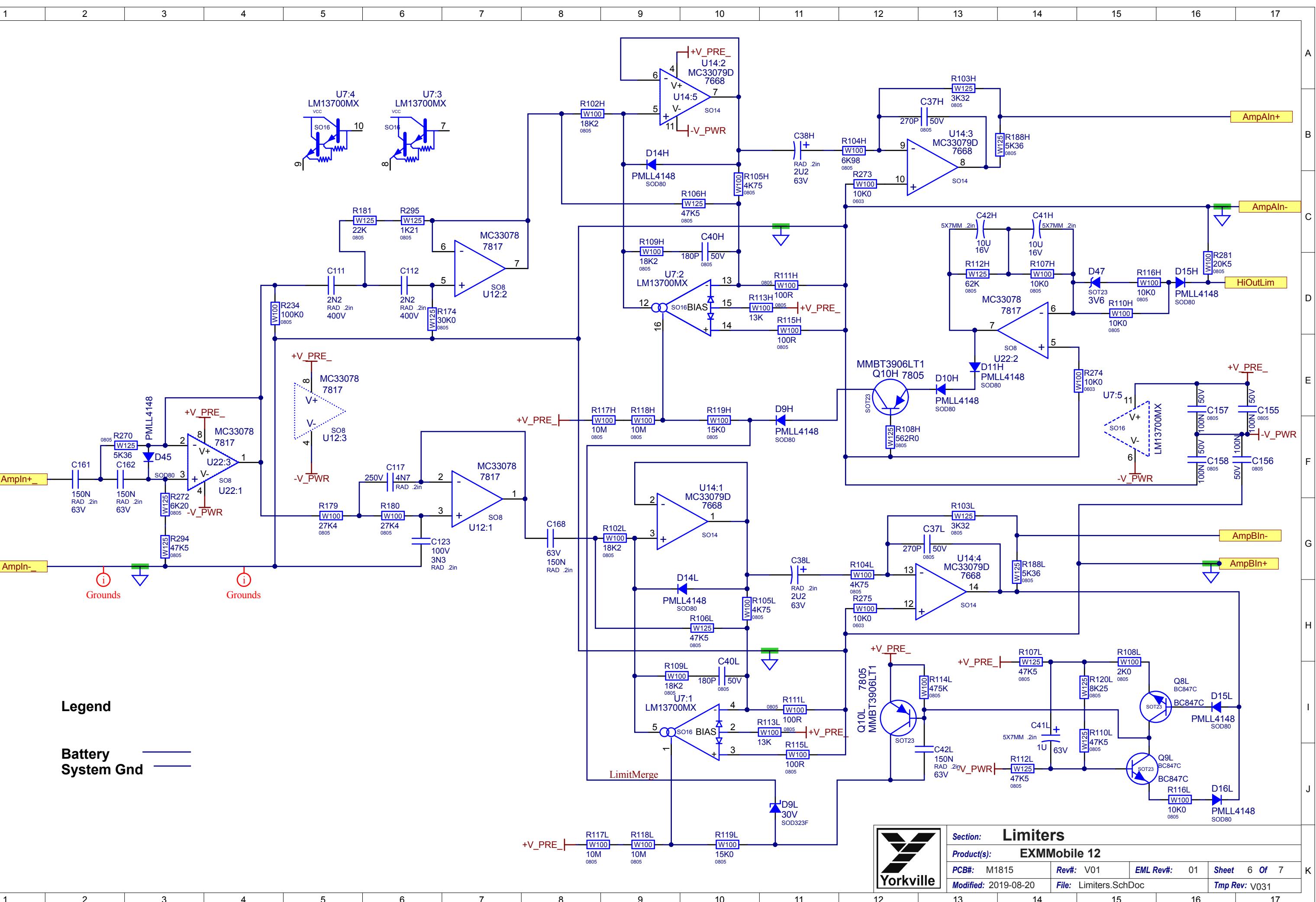
Legend

Battery System Gnd



Section: **Power Amp**
Product(s): **EXMMobile 12**

PCB#:	M1815	Rev#:	V01	EML Rev#:	01	Sheet	5 Of	7
Modified:	2019-08-20	File:	Power Amp.SchDoc			Tmp Rev: V031		



DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	08-JAN-2019	V01	.	RELEASED FOR PRODUCTION
2
3
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#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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THIS SHEET CONTAINS A CHANGE HISTORY LOG, A LIST OF THE POTS & KNOBS AND A LEADS & PINS REFERENCE SECTION.

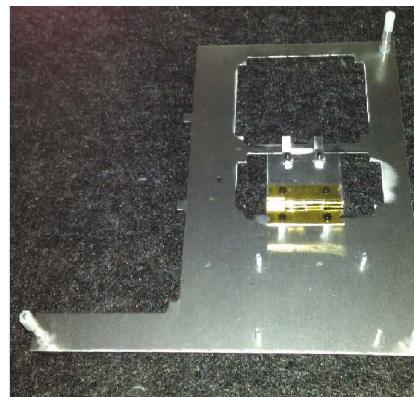
Design Information And History						
Section:	EXMMobile 12					
Product(s):						
PCB#:	M1815	Rev#:	V01	EML Rev#:	01	Sheet 8 Of 7
Modified:	2019-08-20	File:	History.SchDoc	Tmp Rev:	V031	

SPECIAL PRODUCTION NOTES

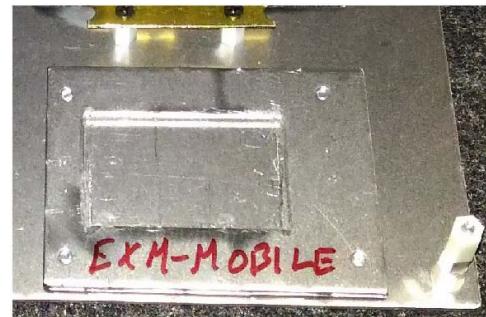
PCB ASSEMBLY DOCUMENTATION

Heatsink Assembly PCB Finishing

EXM 70 EXMMobile 12 Heatsink



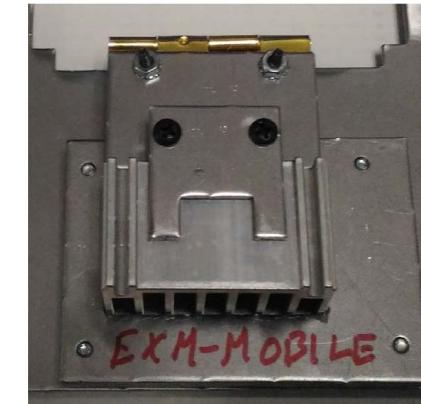
1 Place the EXMMobile 12 guide on the rig.



2 Place the 6698 heatsink in the guide.



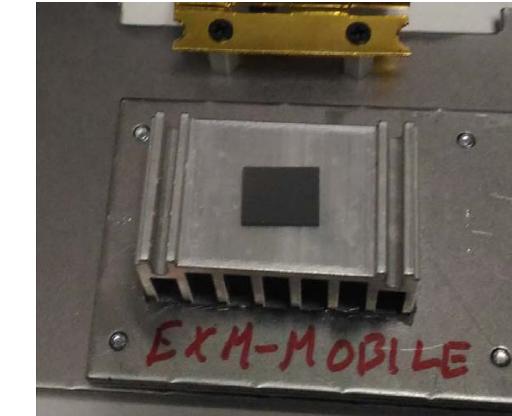
3 Flip the guide for the 4236 pad onto the heatsink.



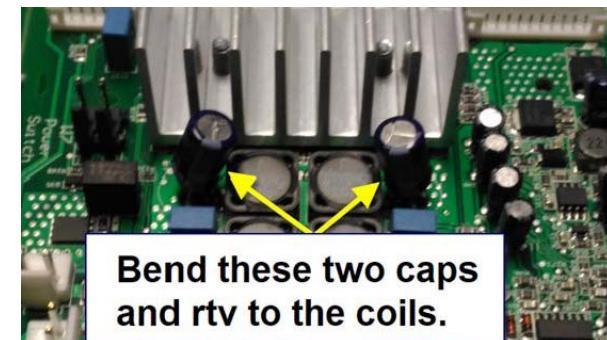
4 Place the 4236 pad onto the heatsink.
Handle the 4236 pad by the edges only.



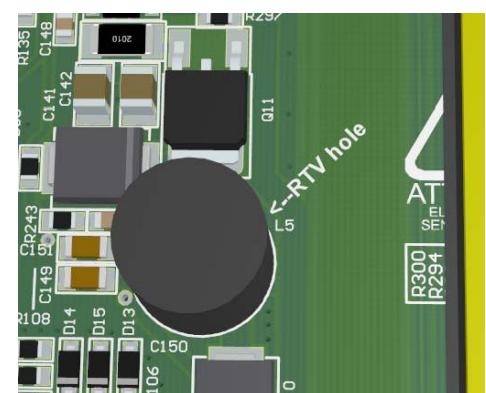
5 Flip the pad guide out of the way.



**6 Place board face down on the rig.
Pin at the top corners.**



RTV in hole underneath L5.

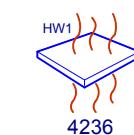
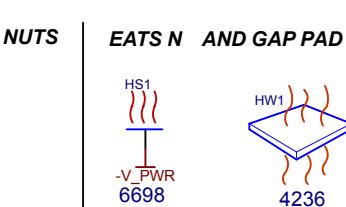


7 Mount 6698 using 2 #8807 screws.
Dip the screws in Loctite.
Tighten to 4 in lbs.



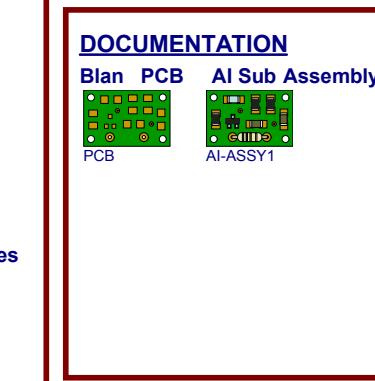
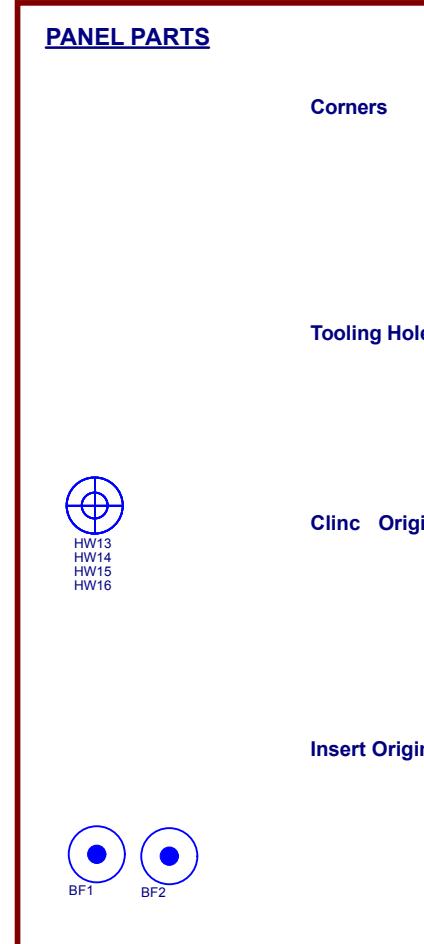
Dip each screw in Loctite. Counter reads.

PCB HARDWARE

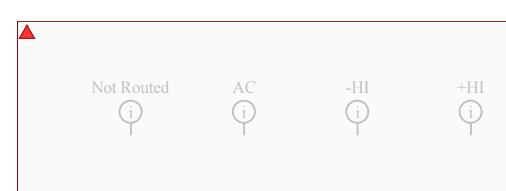


THIS SHEET CONTAINS SPECIAL PRODUCTION NOTES AND A LIST OF PCB HARDWARE PARTS REQUIRED FOR THE BUILD.

Assembly Documentation	
Product(s):	EXMMobile 12
PCB#:	M1815
Rev#:	V01
EML Rev#:	01
Sheet	7 Of 7
Modified:	2019-08-20
File:	Assembly.SchDoc
Tmp Rev#:	V031

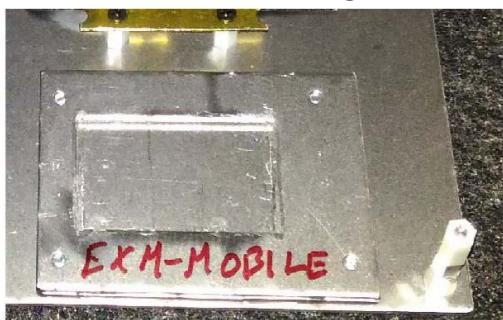
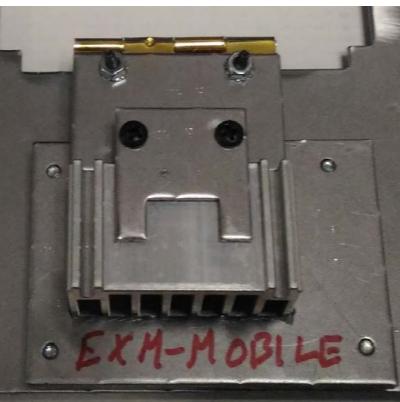
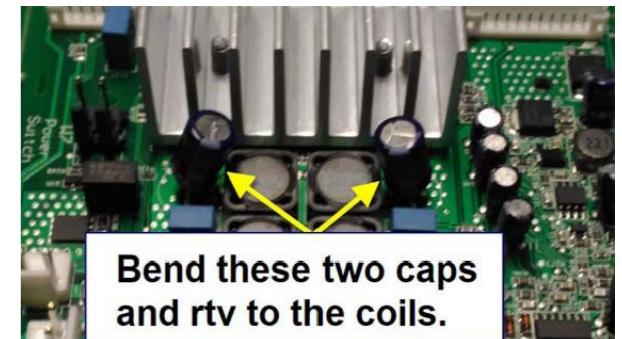
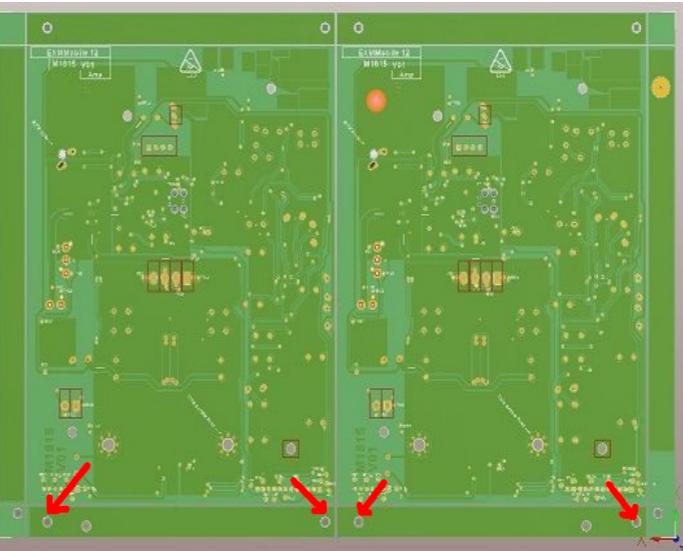
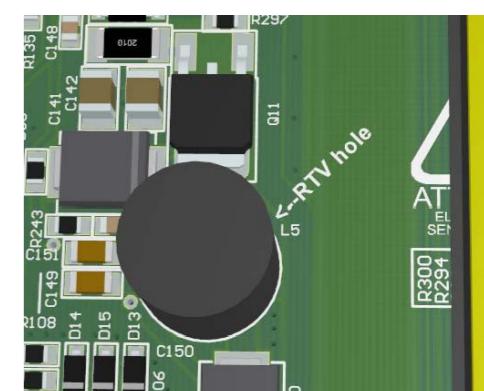


→ —



See PcbDoc for default clearance rules.
Note: You must define your own rules for -HI and +HI.

ECAD Incidentials	
EXMMobile 12	
Product(s): EXMMobile 12	Section: ECAD Incidentials
PCB#: M1815	Rev#: V01
Modified: 2019-08-20	EML Rev#: 01
File: ECO.SchDoc	Sheet 9 Of 7
	Tmp Rev: V031

SPECIAL PRODUCTION NOTES**PCB ASSEMBLY DOCUMENTATION****Heatsink Assembly PCB Finishing****EXM 70 EXMMobile 12 Heatsink****1 Place the EXMMobile 12 guide on the rig.****2 Place the 6698 heatsink in the guide.****3 Flip the guide for the 4236 pad onto the heatsink.****4 Place the 4236 pad onto the heatsink.**
Handle the 4236 pad by the edges only.**5 Flip the pad guide out of the way.****6 Place board face down on the rig.**
Pin at the top four corners.**RTV in hole underneath L5.****7 Mount 6698 using 2 #8807 screws.**
Dip the screws in Loctite.
Tighten to 4 in lbs.**Dip each screw in Loctite. Counter clockwise.****PCB HARDWARE**

SCREWS AND BOLTS	NUTS	EATS N AND GAP PAD
#8807 2		HS1 HW1 6698 4236

THIS SHEET CONTAINS SPECIAL PRODUCTION NOTES AND A LIST OF PCB HARDWARE PARTS REQUIRED FOR THE BUILD.

Section: Assembly Documentation				
Product(s):	PCB#:	Rev#:	EML Rev#:	Sheet Of
EXMMobile12	M1815	V01	01	
	Modified: 2019-02-26	File: Assembly.SchDoc		Tmp Rev: V031

DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	08-JAN-2019	V01	.	RELEASED FOR PRODUCTION
2
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#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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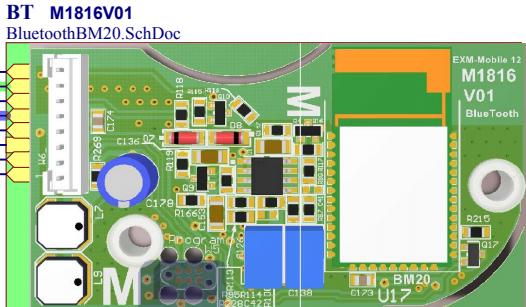


THIS SHEET CONTAINS A CHANGE HISTORY LOG, A LIST OF THE POTS & KNOBS AND A LEADS & PINS REFERENCE SECTION.

9708 Po er Supply

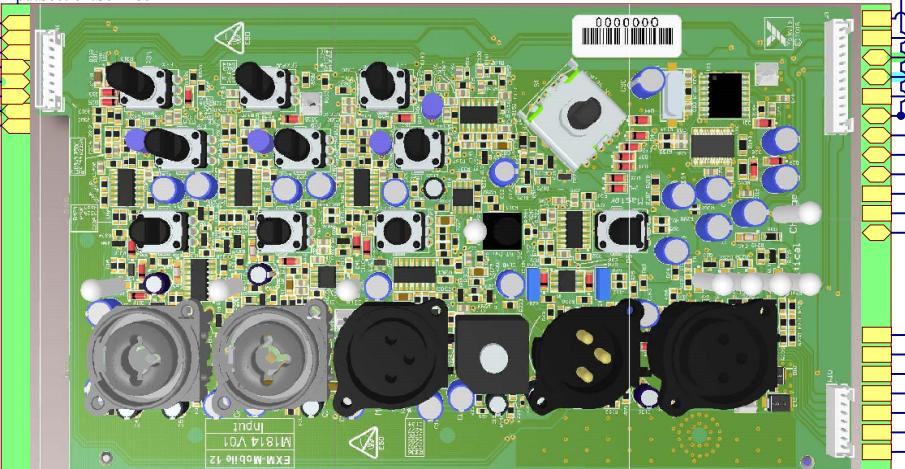
Legend

Battery System Gnd



3 Cable

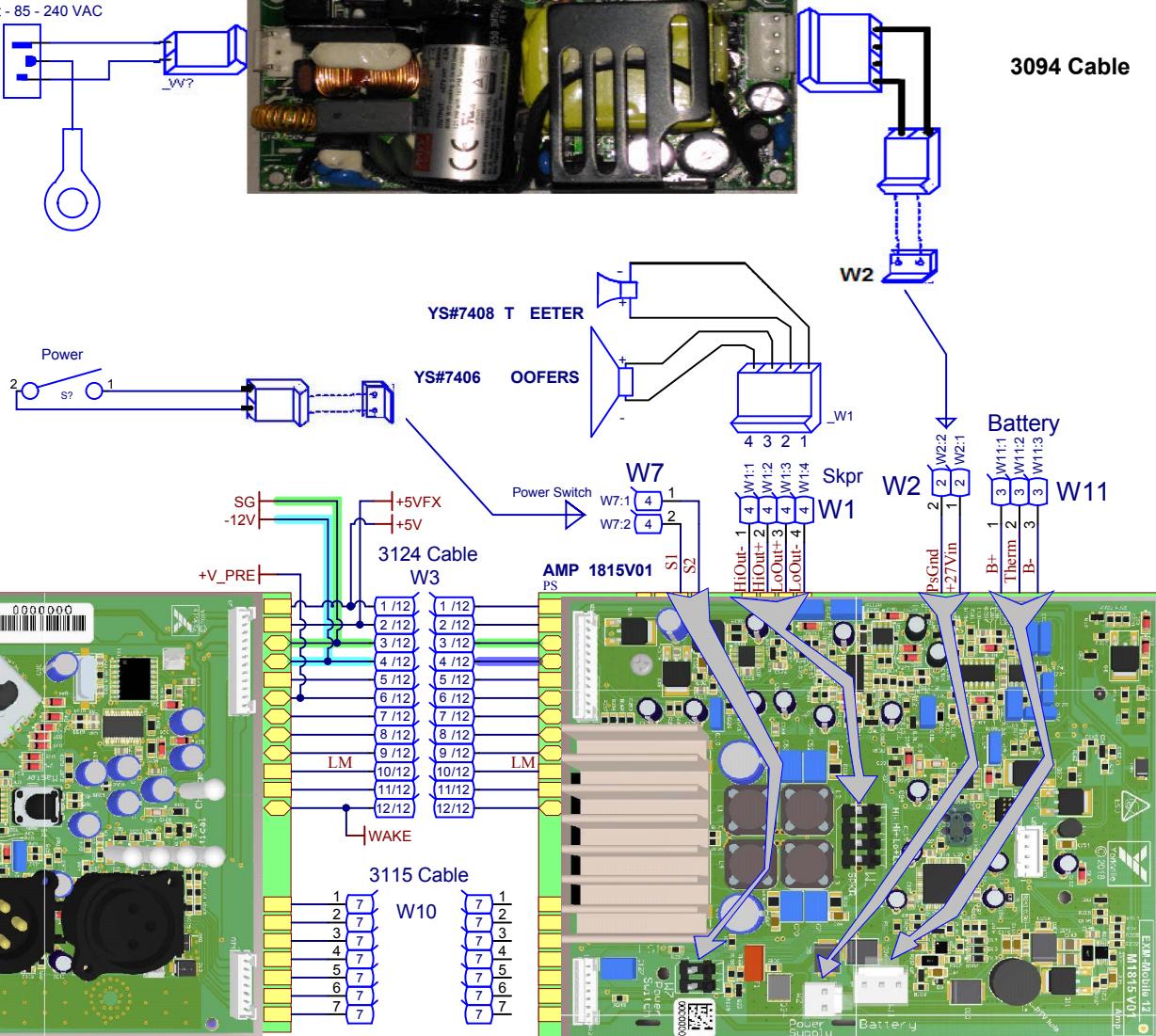
Input M1814V01
InputSection.SchDoc



Input - 85 - 240 VAC



3094 Cable



Yorkville Sound Ltd.
550 Granite Court
Pickering, ON
Canada L1W 3Y8
www.yorkvillesound.com

EXMMobile 12

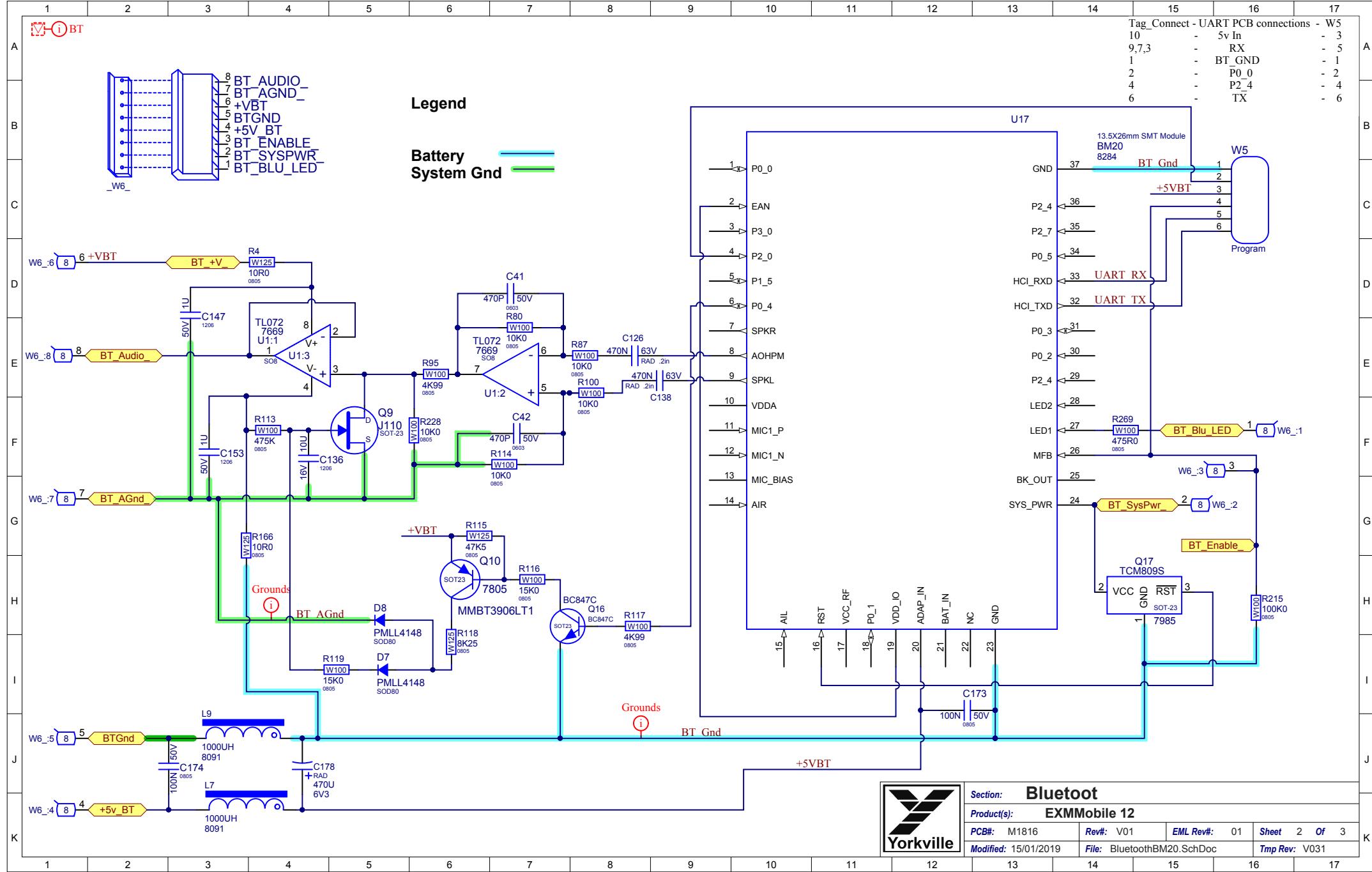
Battery Powered PA Speaker

Section 10.1

6 Rev#: V01 E

1/2019 File: Top Sheet.Sch

Tmp Rev: V031



DESIGN HISTORY AND INFORMATION

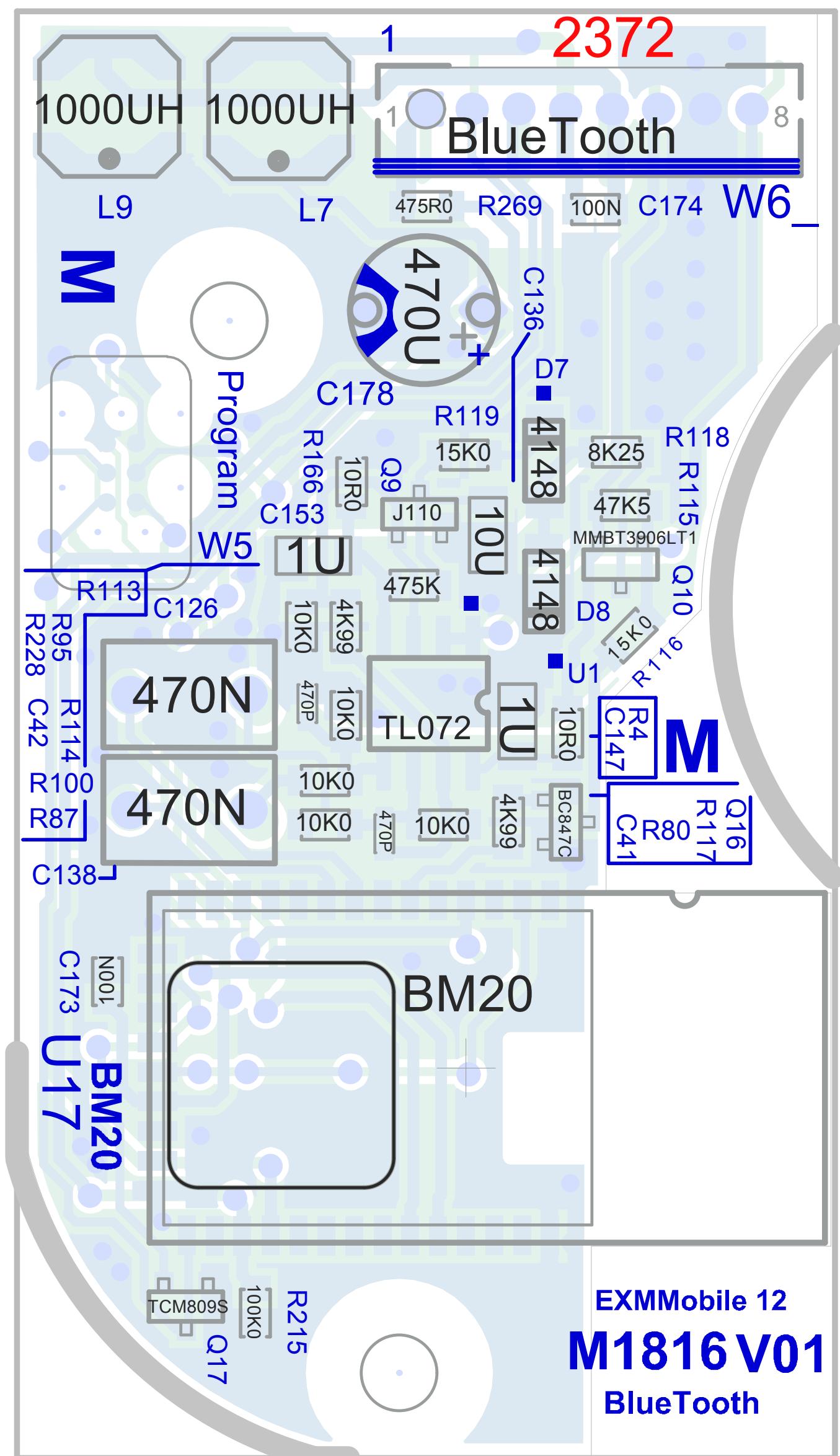
CHANGE HISTORY

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	08-JAN-2019	V01	.	RELEASED FOR PRODUCTION
2
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#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
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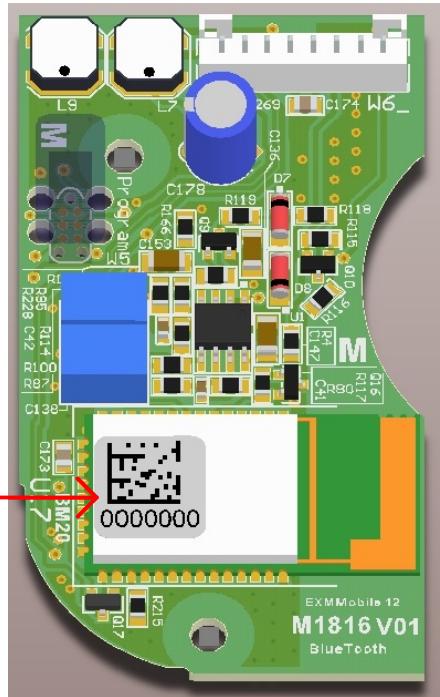
THIS SHEET CONTAINS A CHANGE HISTORY LOG, A LIST OF THE POTS & KNOBS AND A LEADS & PINS REFERENCE SECTION.



PCB ASSEMBLY DOCUMENTATION

SPECIAL PRODUCTION NOTES

Put Data Matrix Label #8372 on top of U17.

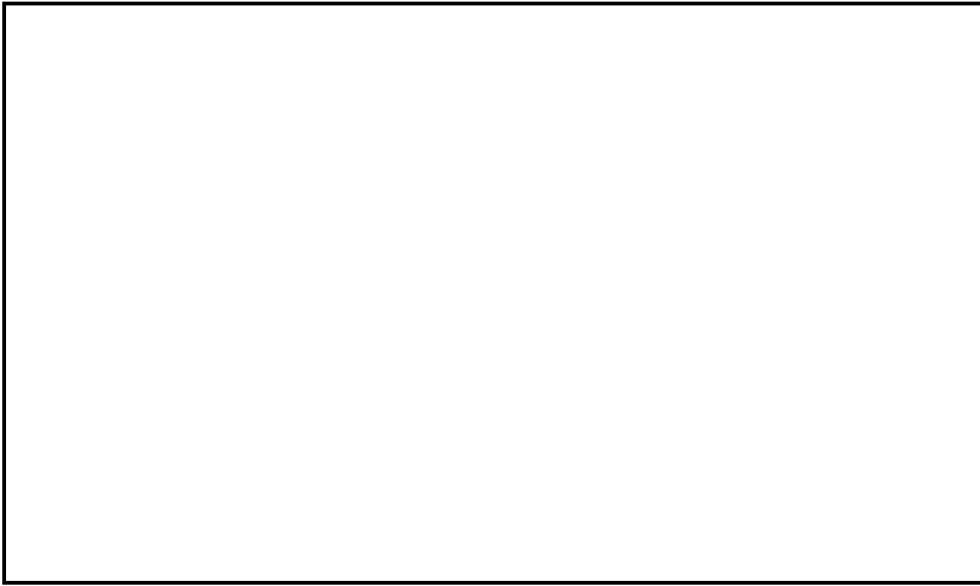


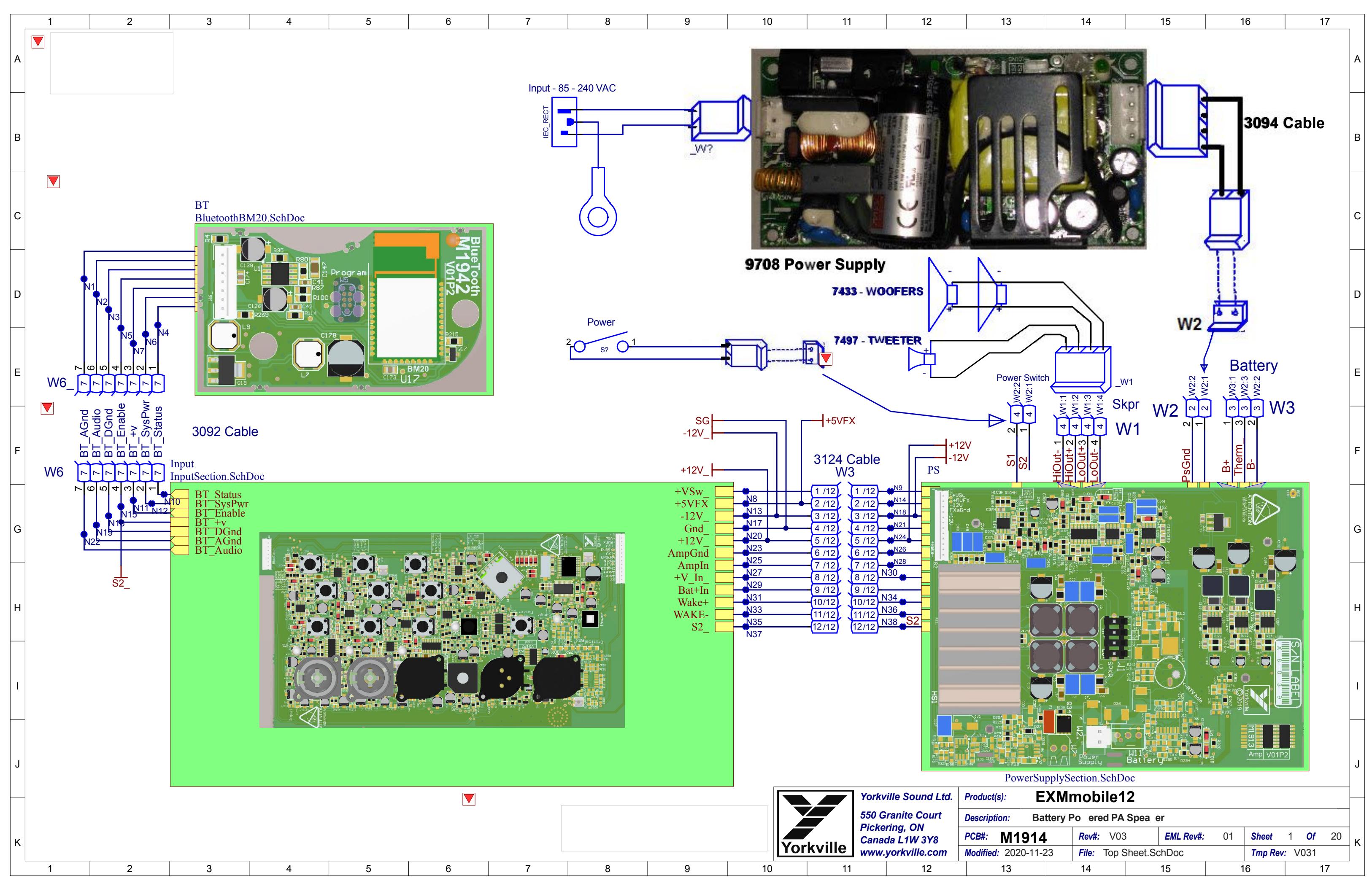
THIS SHEET CONTAINS SPECIAL PRODUCTION NOTES AND A LIST OF PCB HARDWARE PARTS REQUIRED FOR THE BUILD.

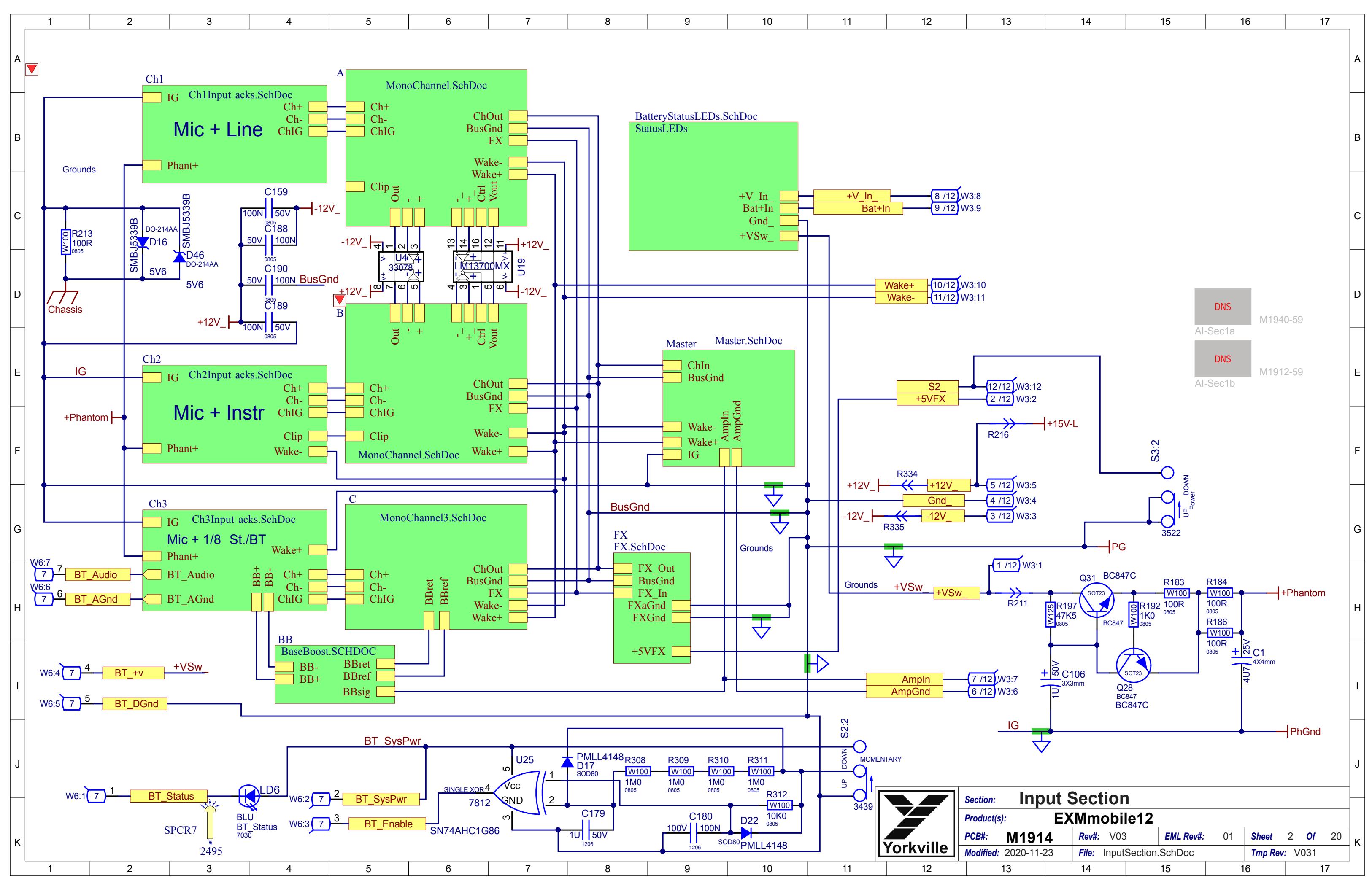
DESIGN HISTORY AND INFORMATION

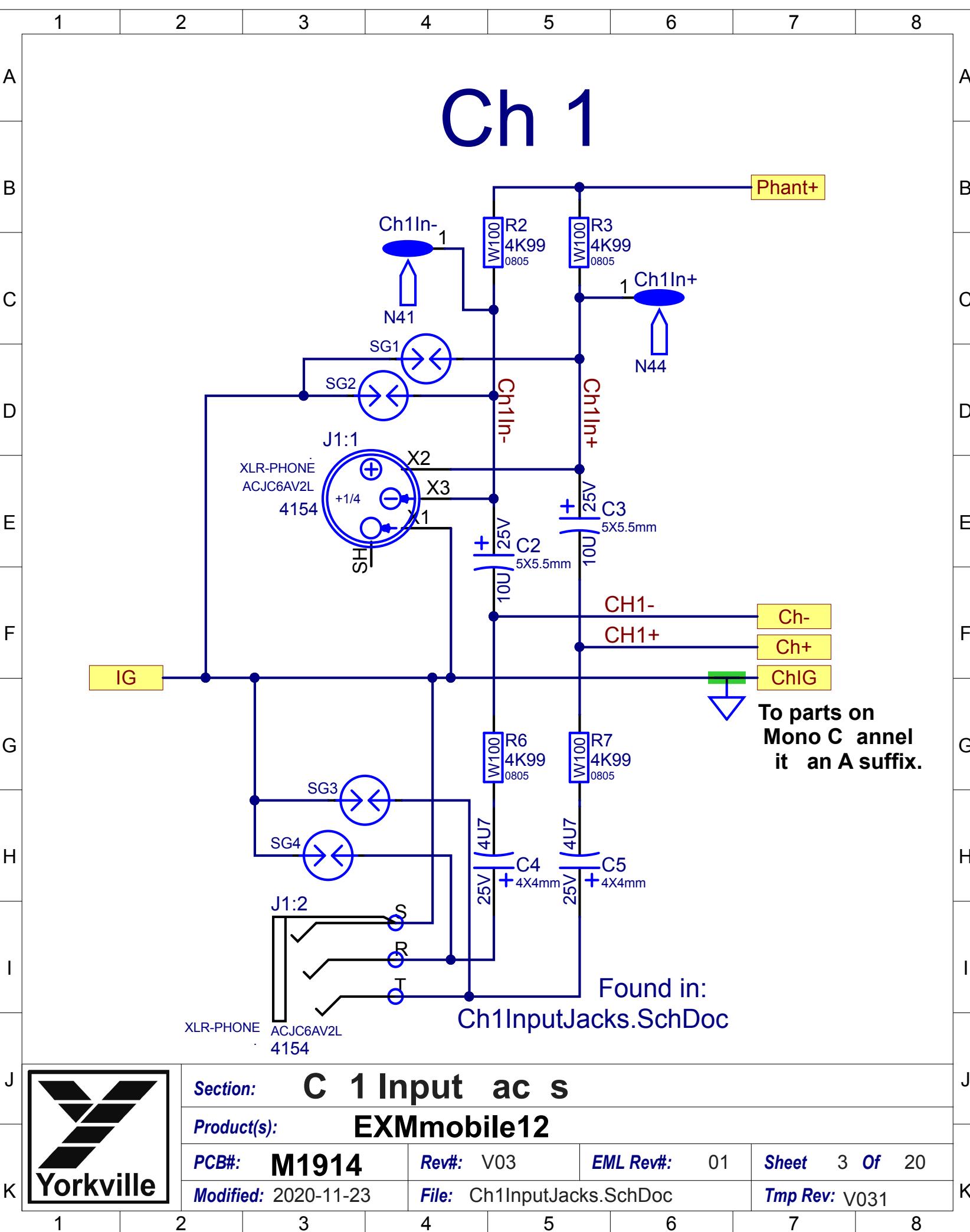
CHANGE HISTORY

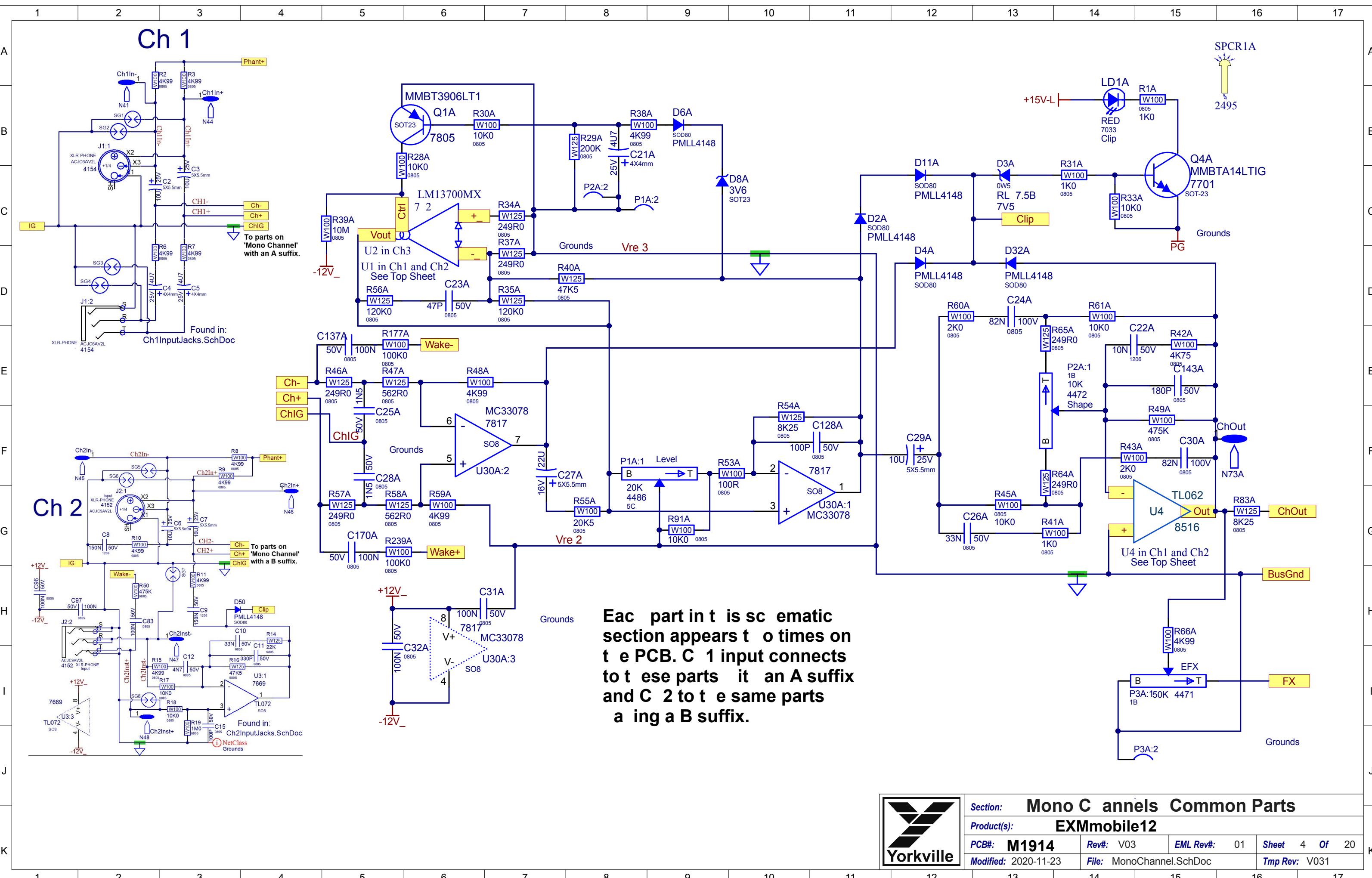
#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	08-JAN-2019	V01	.	RELEASED FOR PRODUCTION
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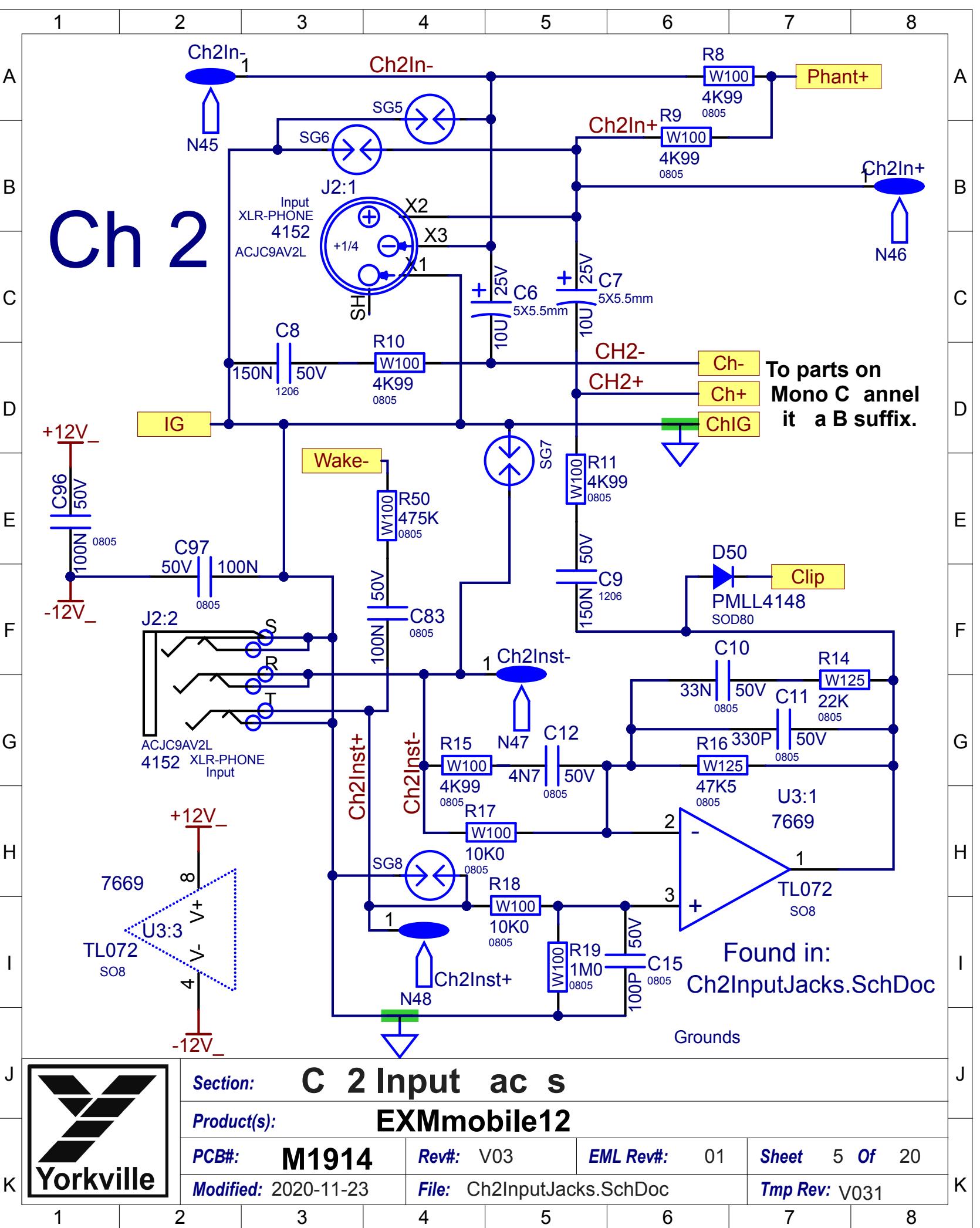


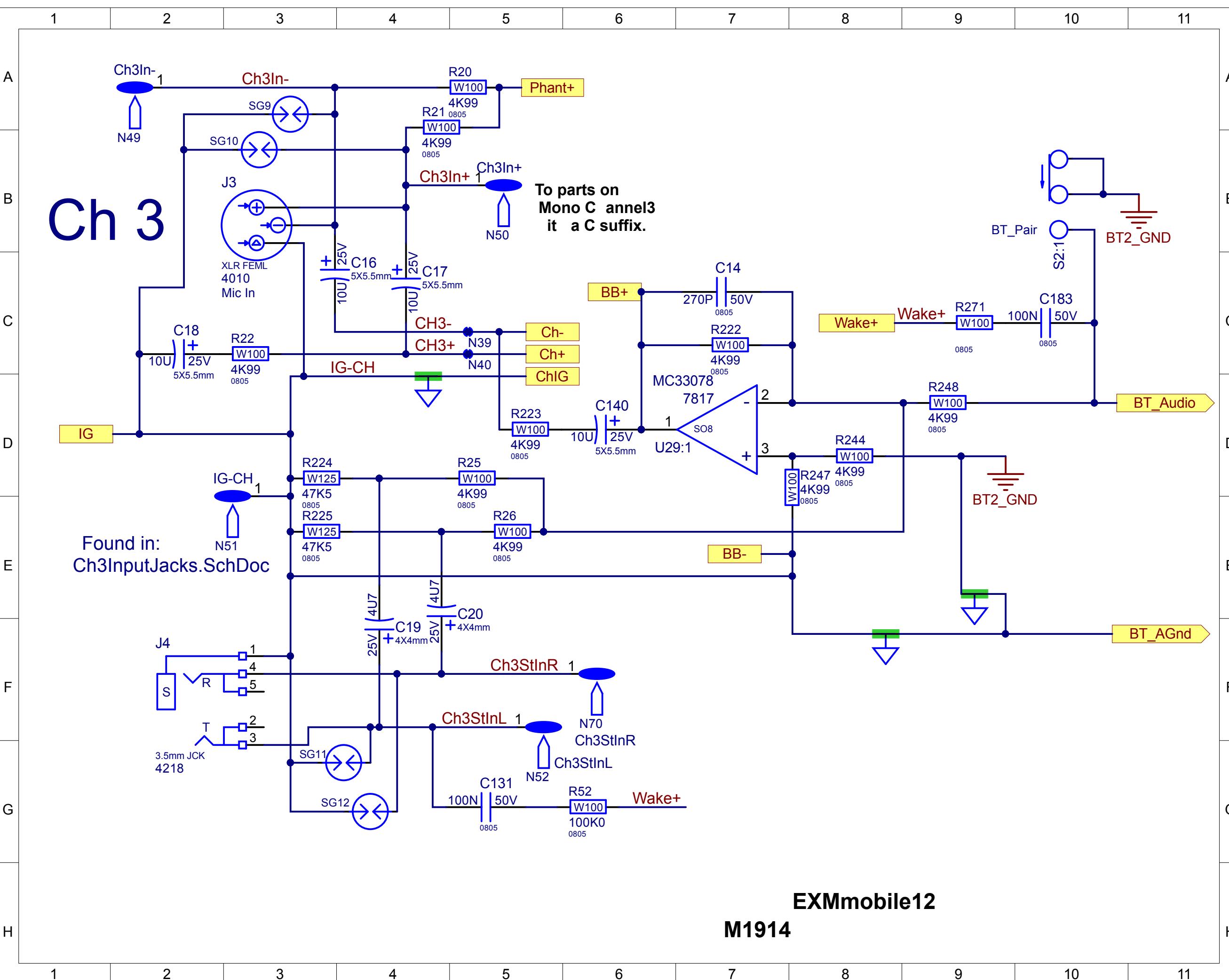


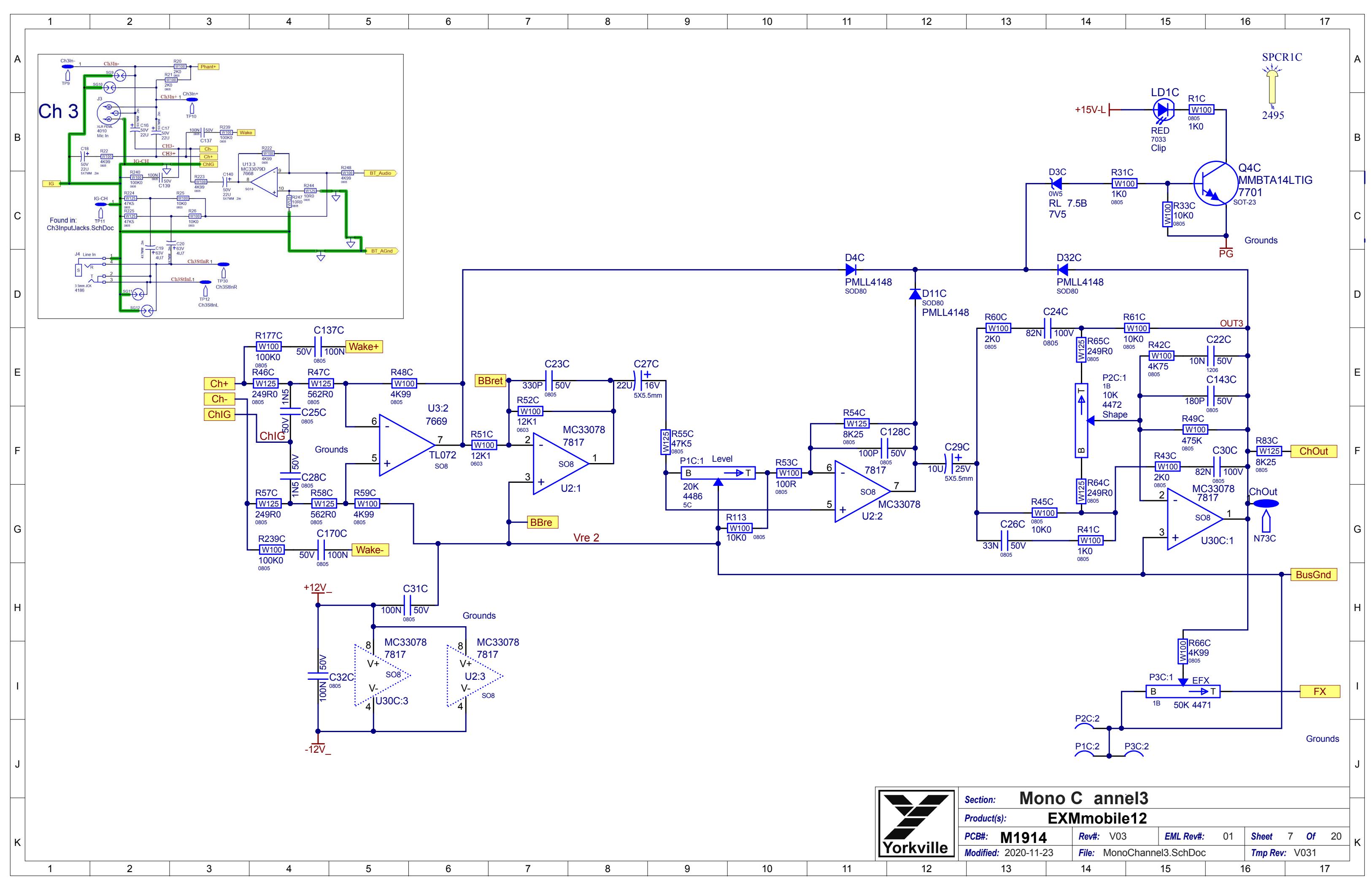


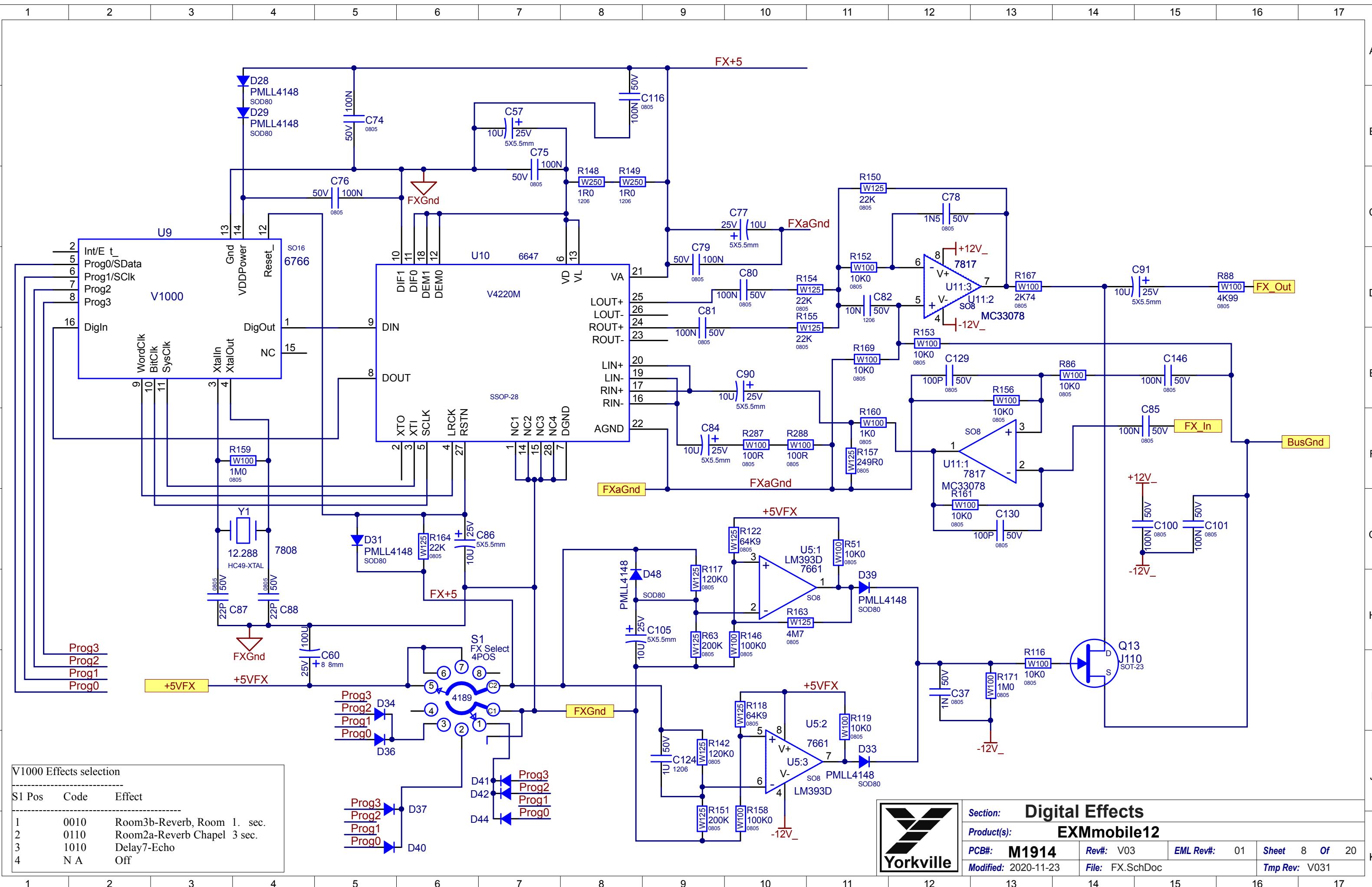


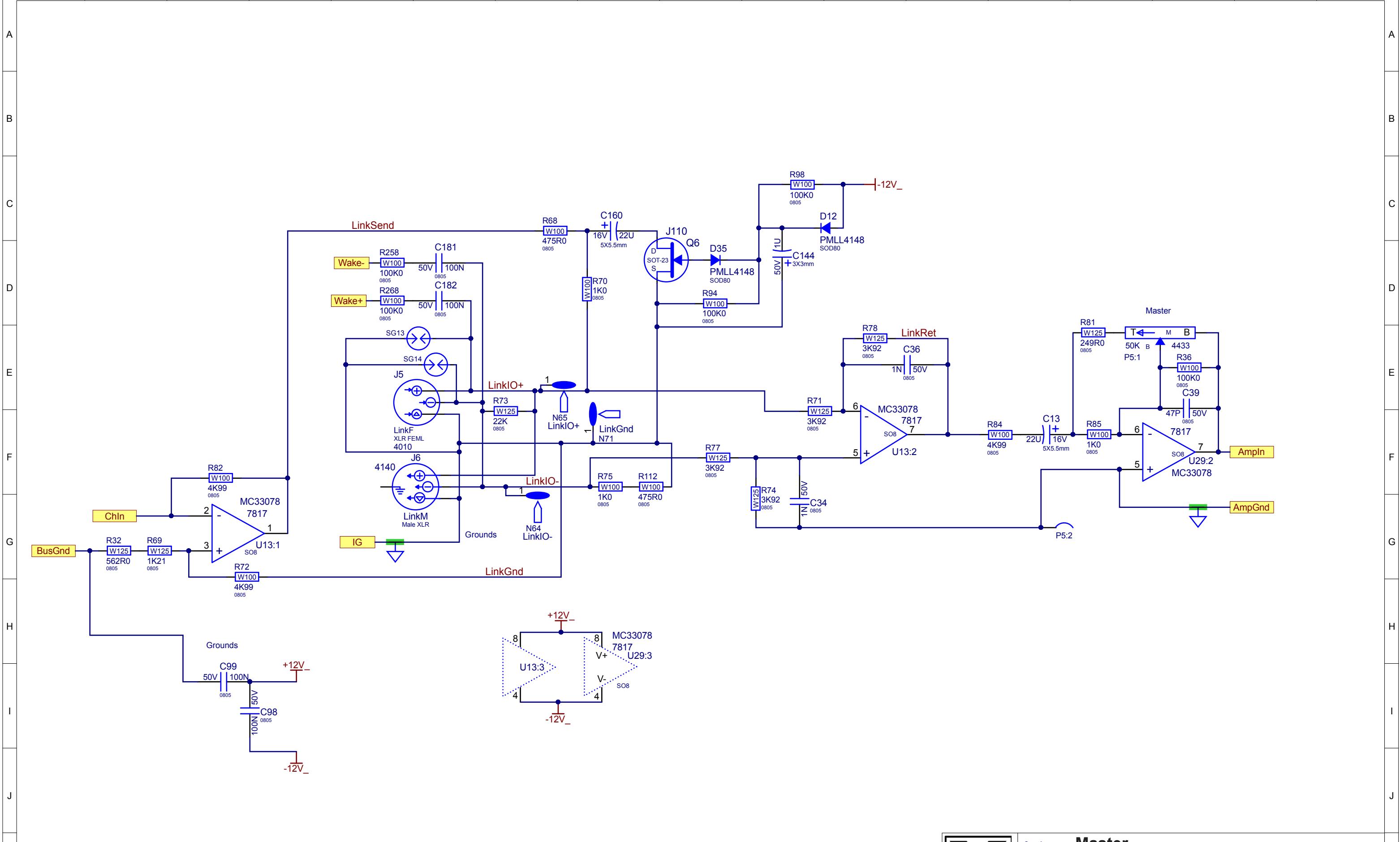






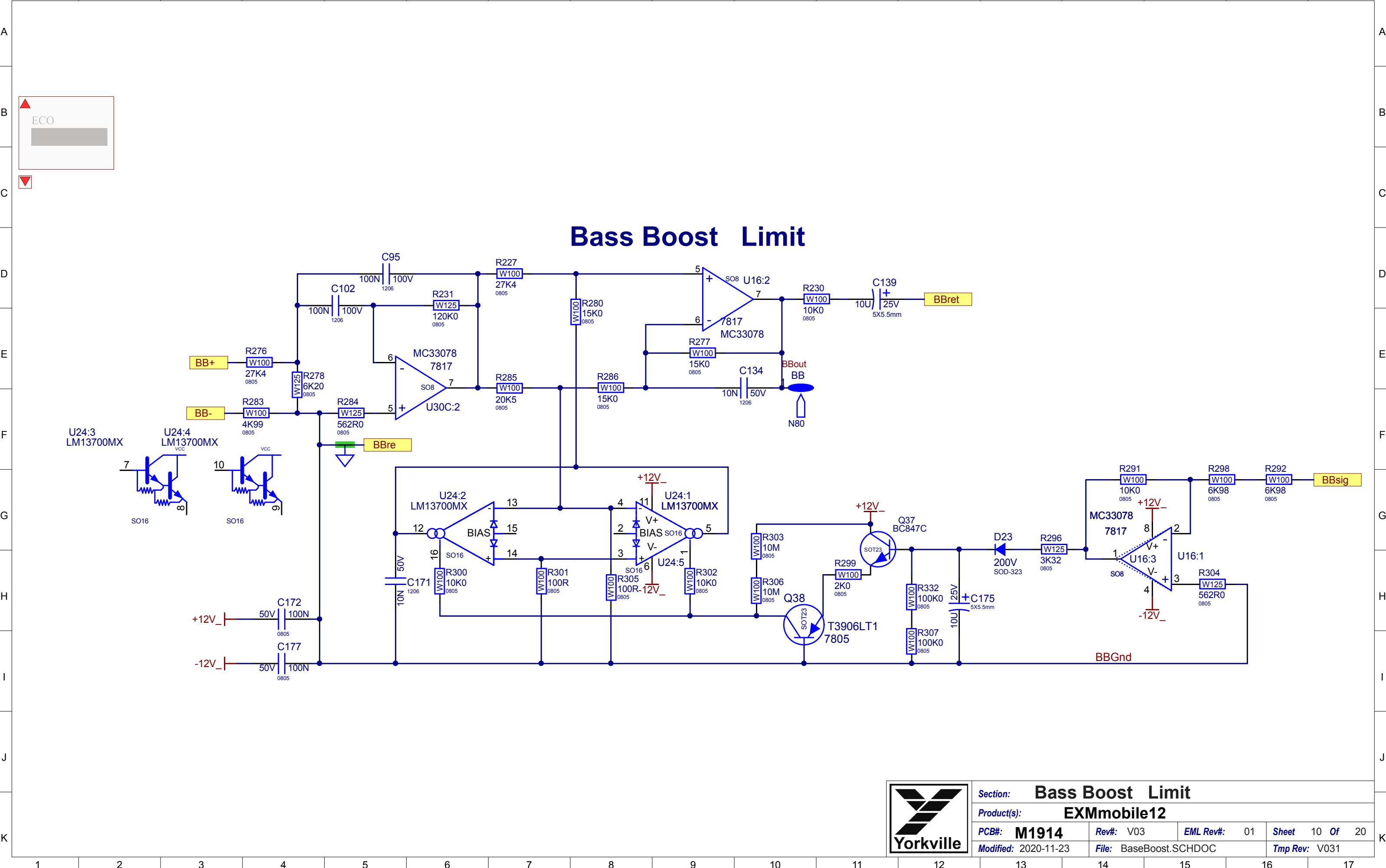


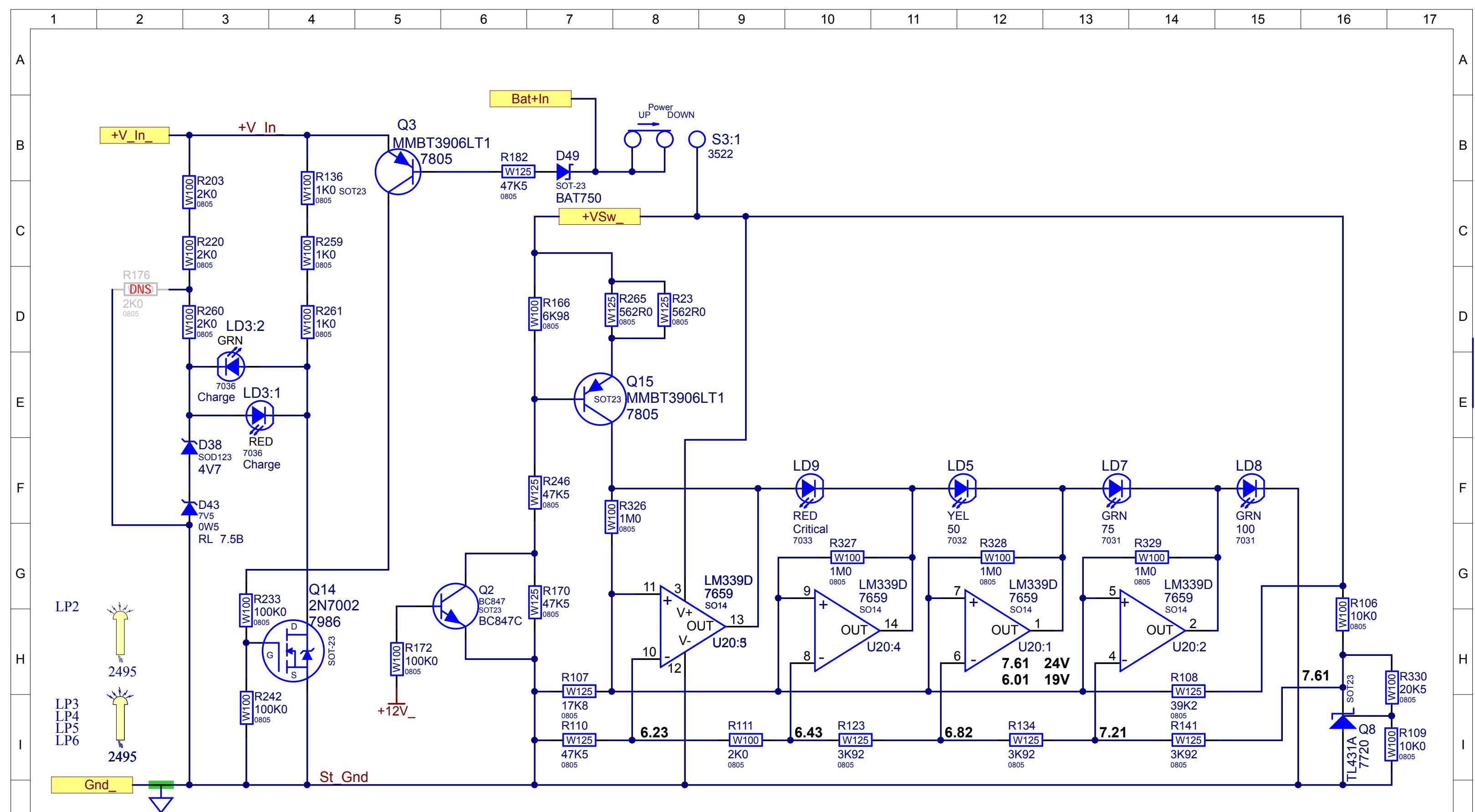




Section: Master	
Product(s): EXMmobile12	
PCB#:	M1914
Modified:	2020-11-23
File:	Master.SchDoc
Tmp Rev:	V031

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17



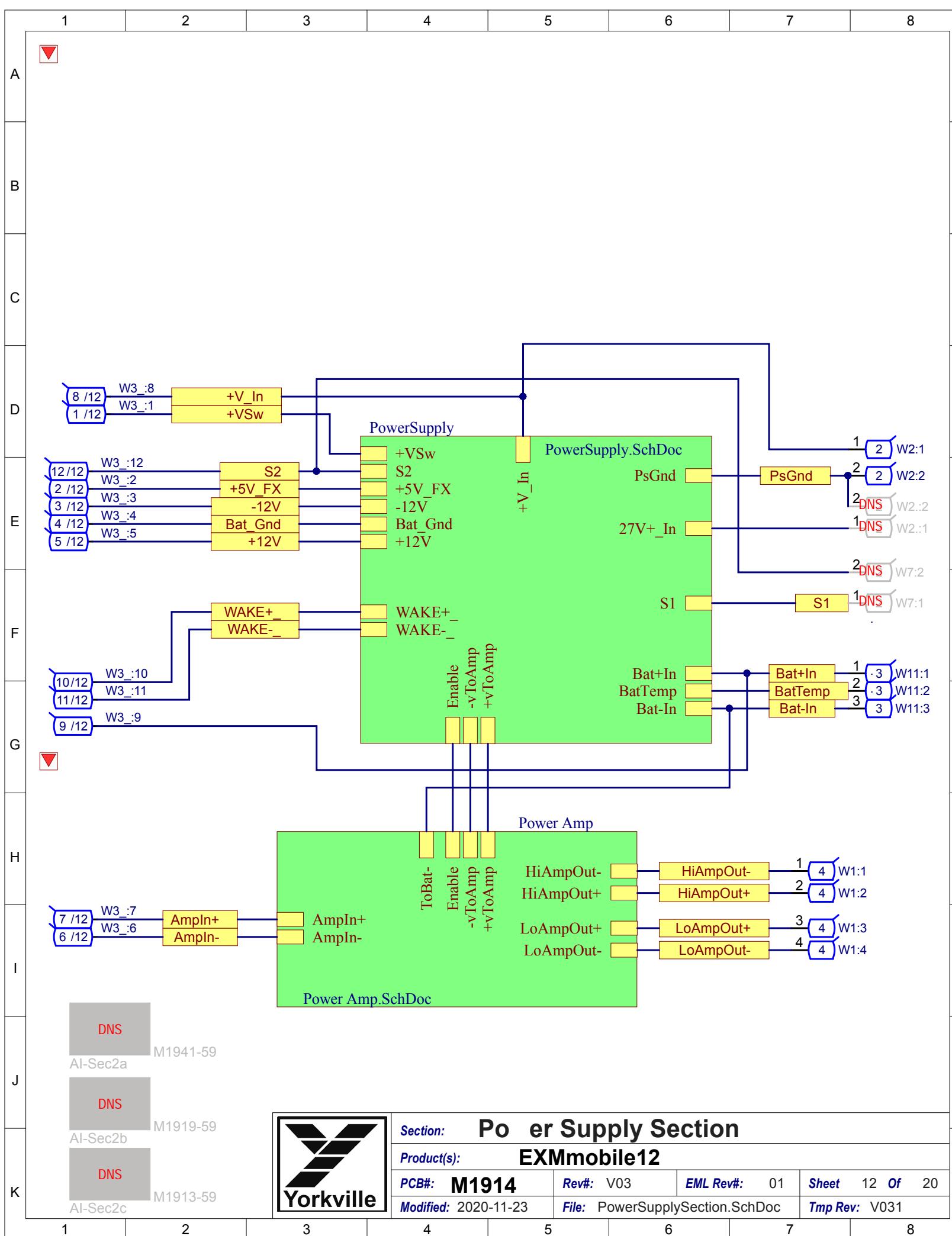


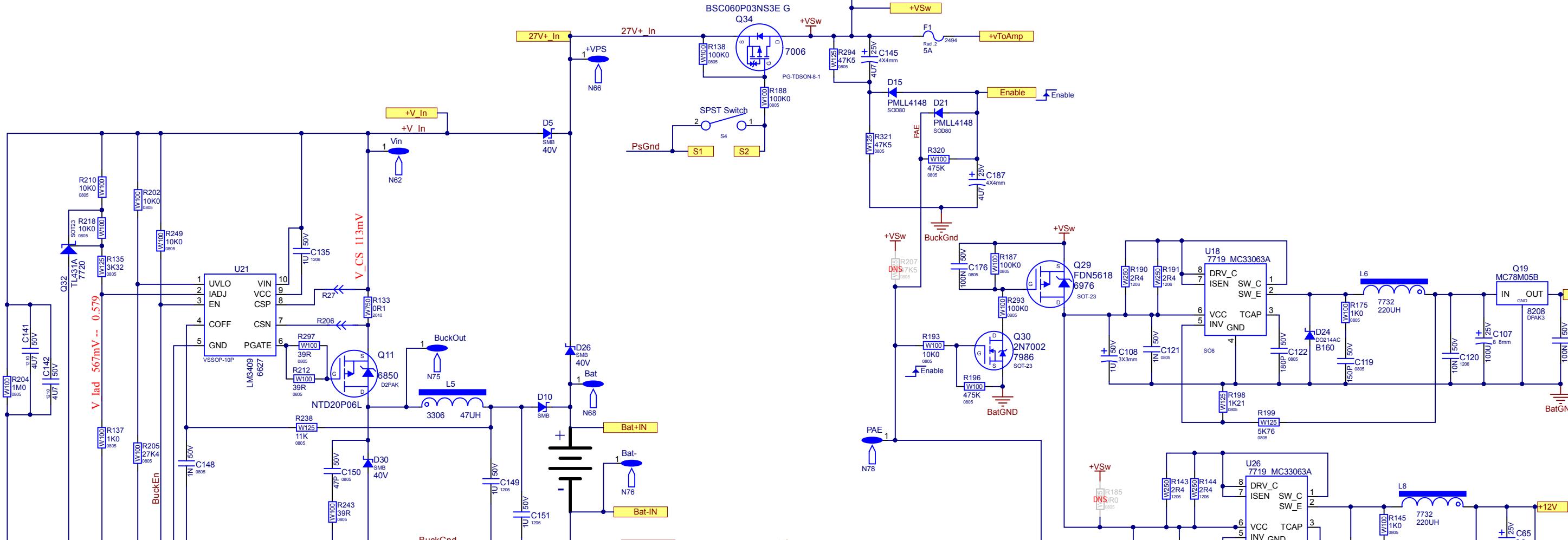
Section: Battery Status

Product(s): EXMmobile12

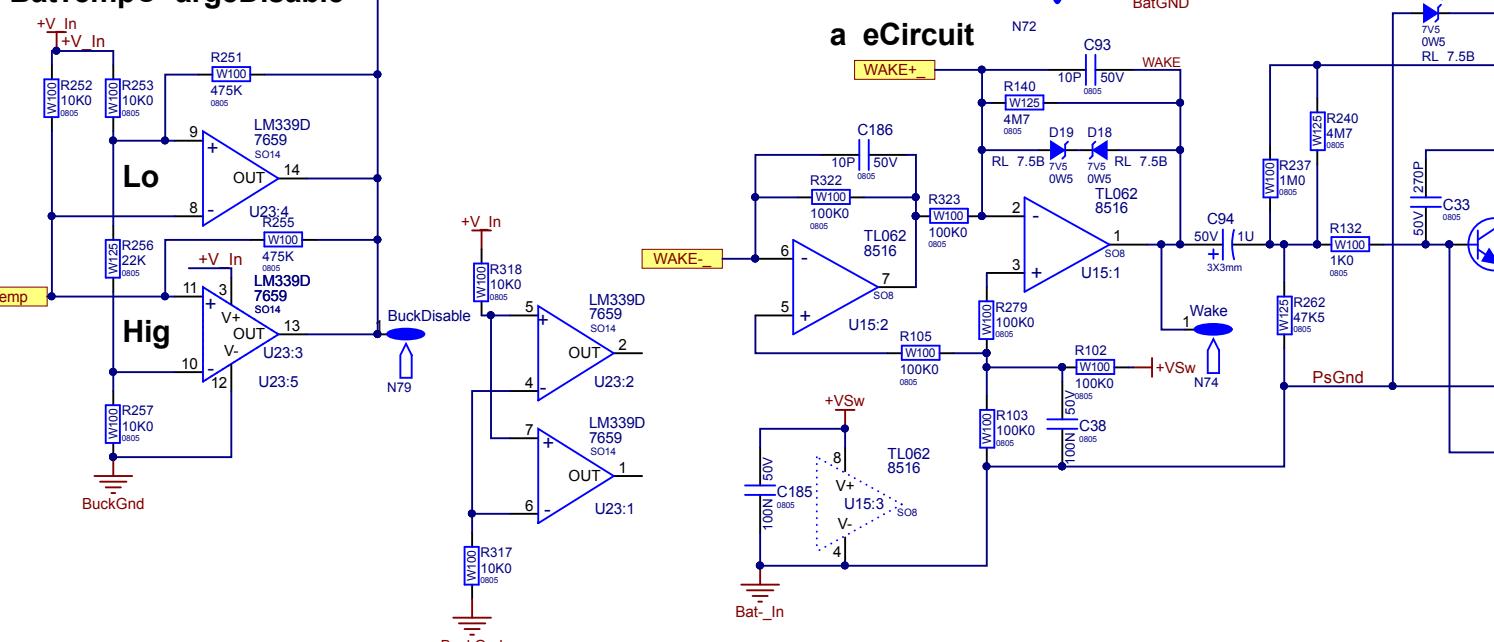
PCB#: M1914 **Rev#:** V03 **EML Rev#:** 01 **Sheet** 11 **Of** 20

Modified: 2020-11-23 | **File:** BatteryStatusLEDs.SchDoc | **Tmp Rev:** V031 | **K**

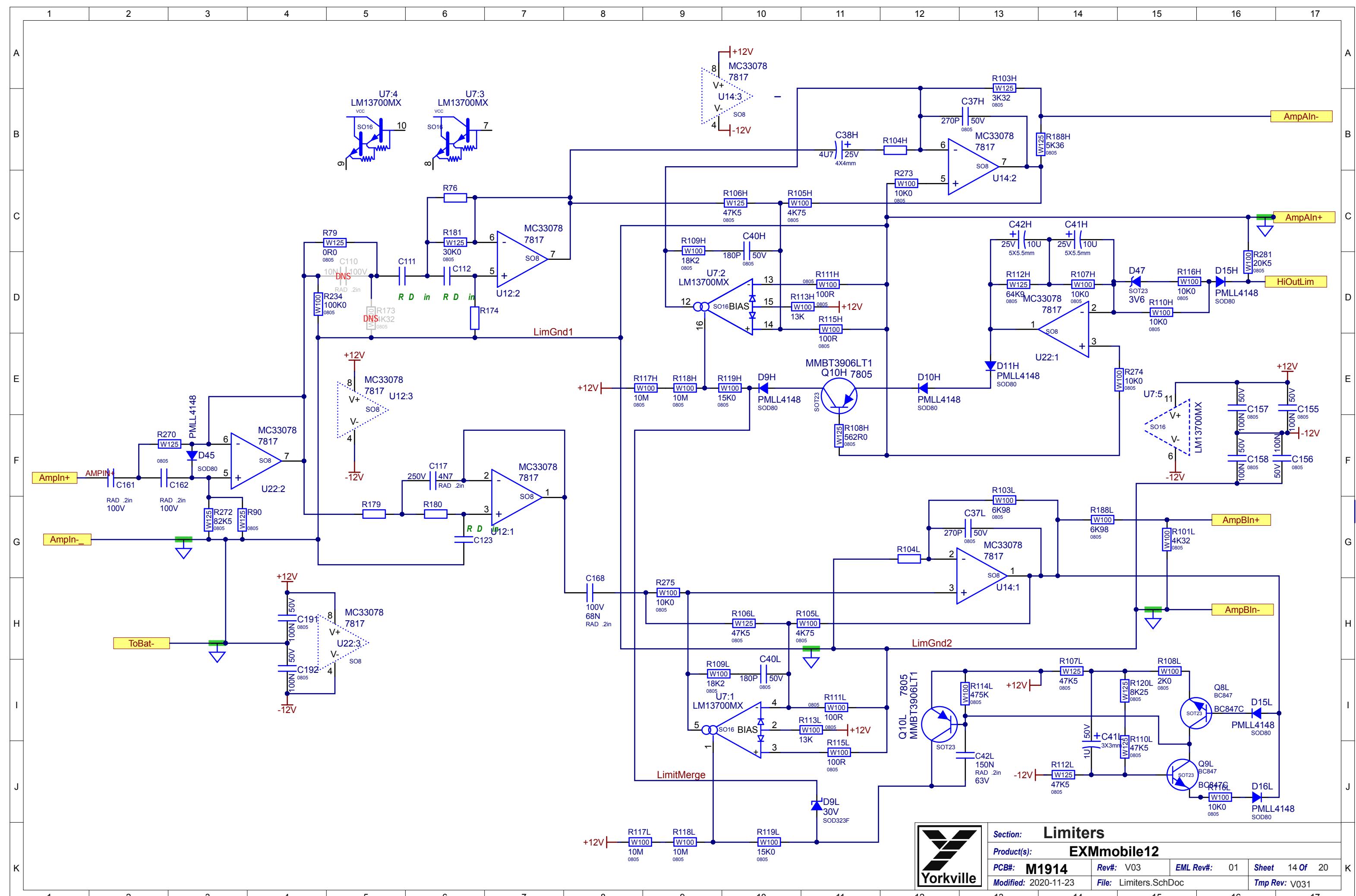


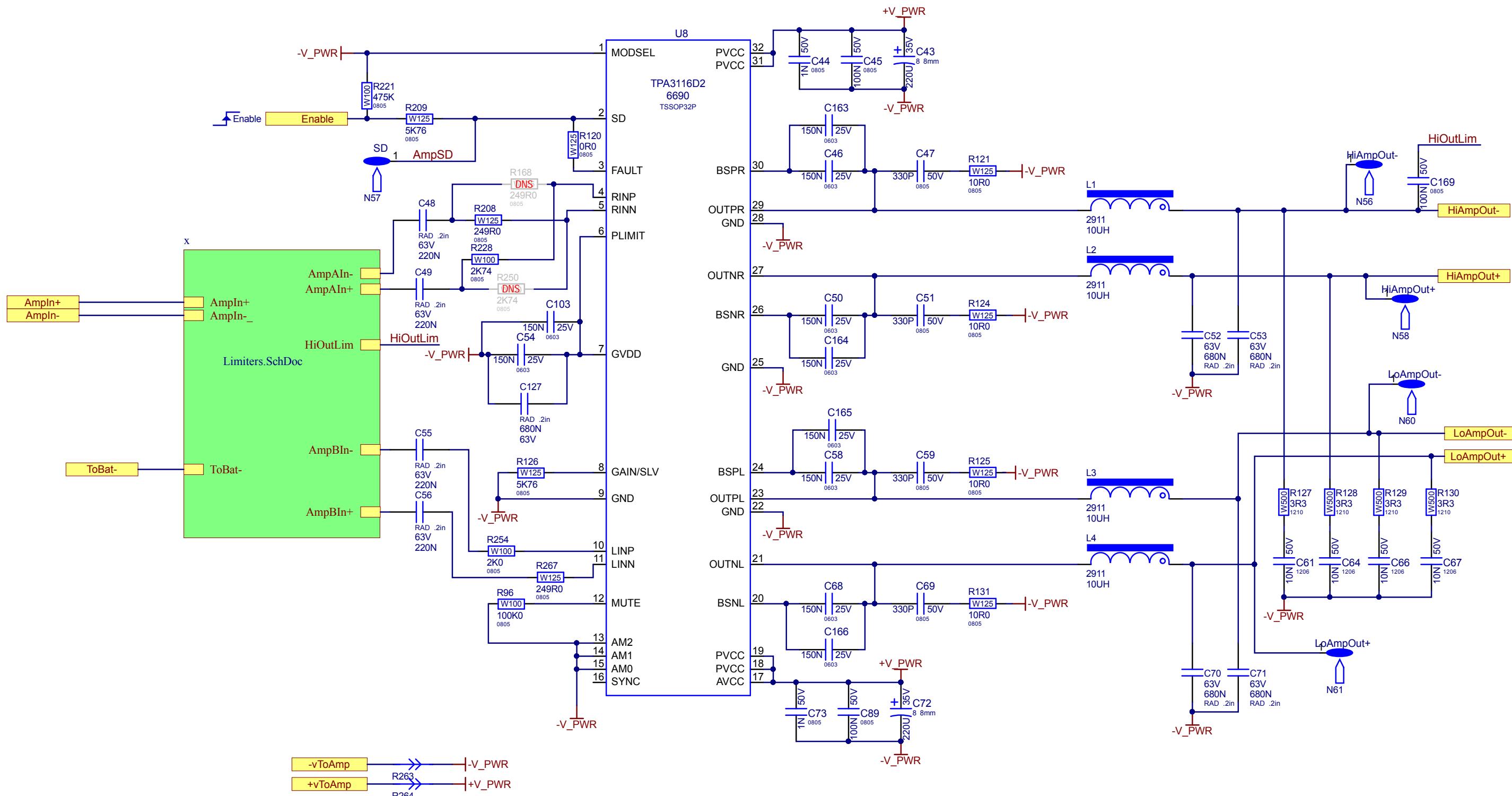


BatTempC argeDisable



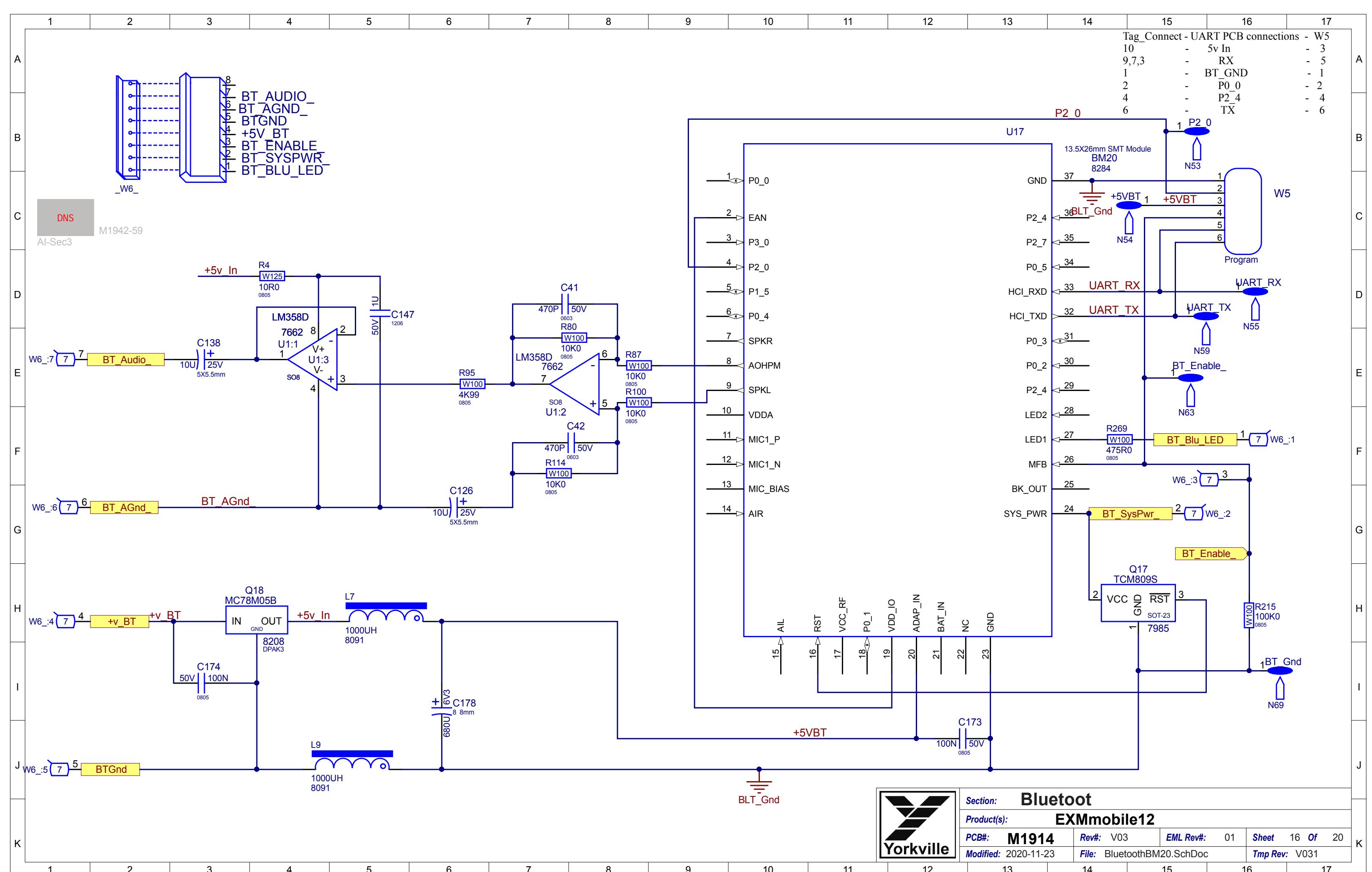
SleepTimer

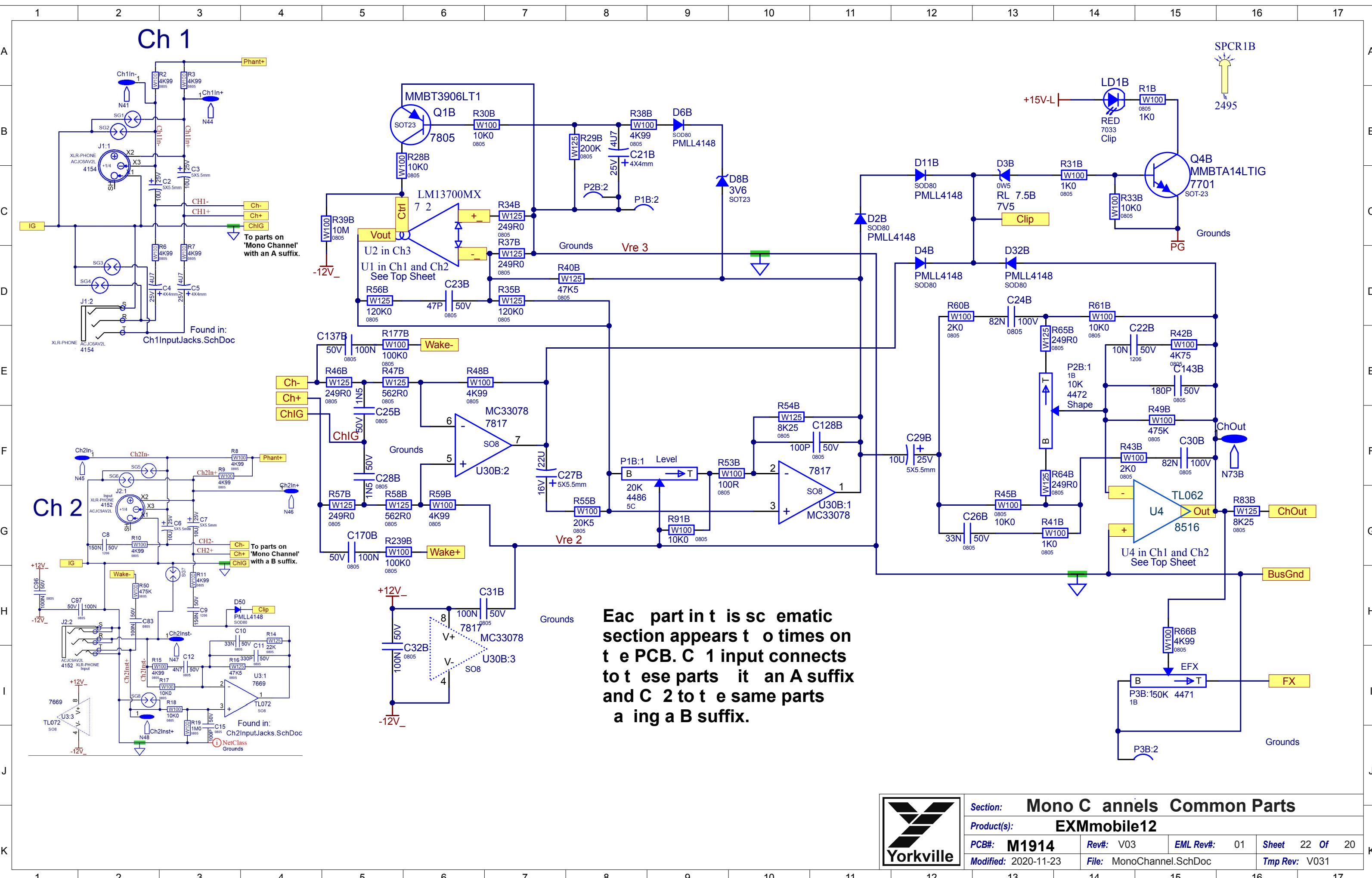




Section: Power Amp
Product(s): EXMmobile12

PCB#: **M1914** Rev#: V03 EML Rev#: 01 Sheet 15 Of 20 K
 Modified: 2020-11-23 File: Power Amp.SchDoc Tmp Rev: V031





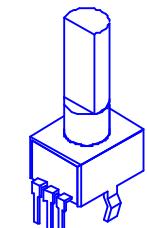
DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	06-AUG-2020	V01	.	RELEASED FOR PRODUCTION
2	18-SEP-2020	V02	9594	Multiple revisions per schematics in PC9594 pd document
3	18-NOV-2020	V03	9597	Replaced 5V regulators Q18 and Q19 7918 with 8208
4	19-NOV-2020	V03	9614	Backed off +5V copper fill and trace from mtg screw in bluetooth section.
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POTENTIOMETERS AND NOBS

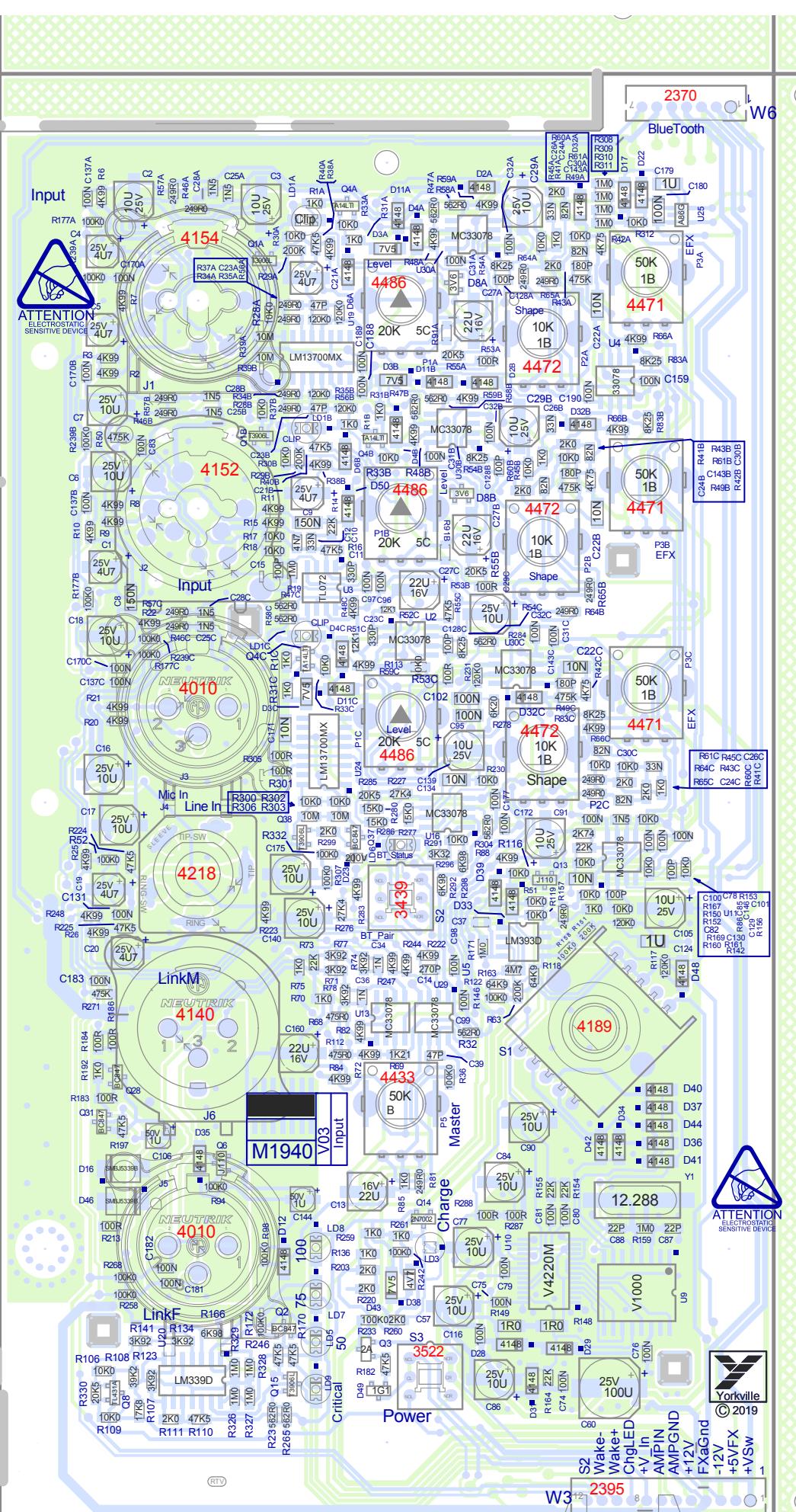
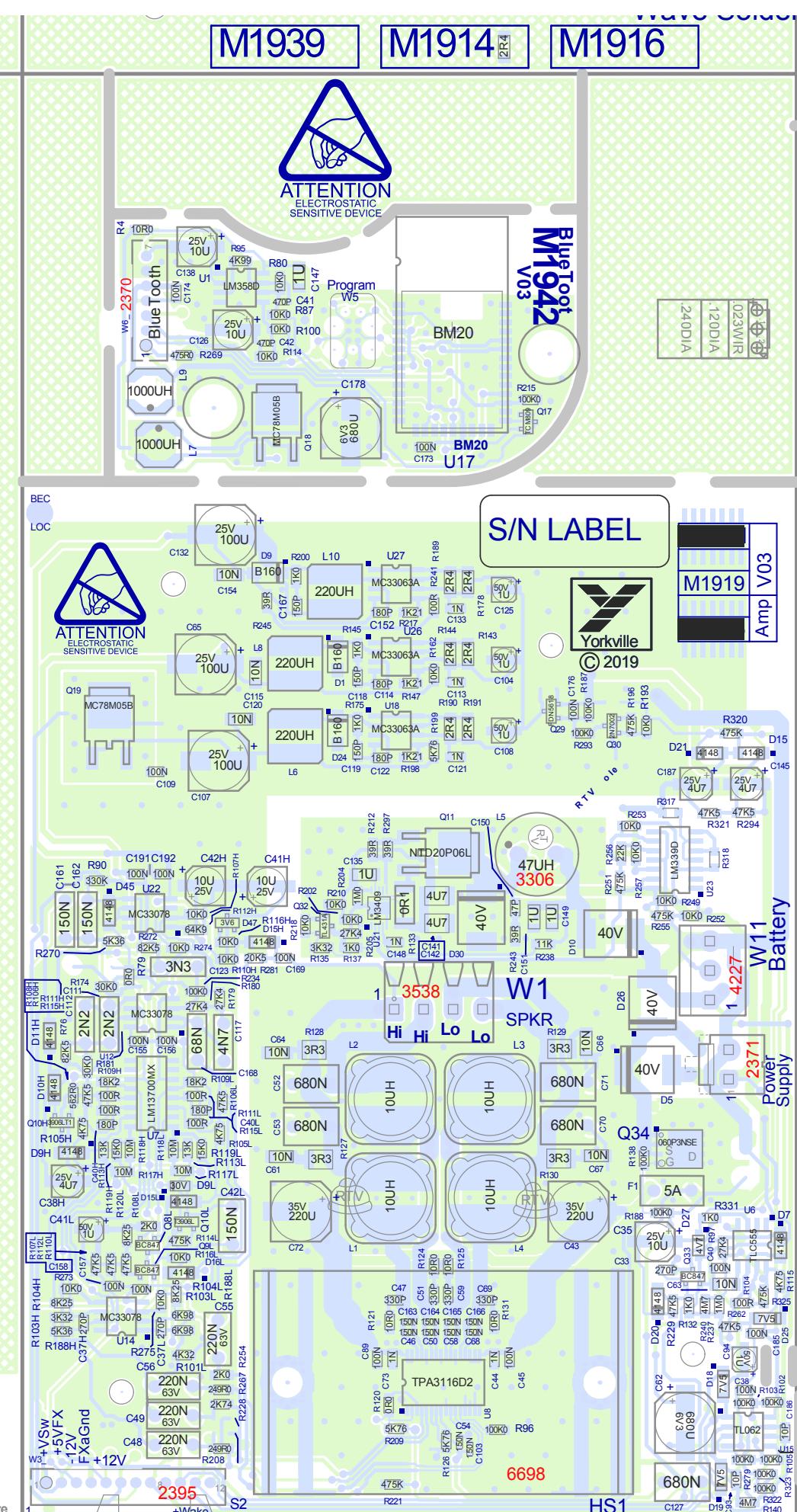
POTENTIOMETERS & KNOBS					
REF	FUNCTION	POT S	YS#	STYLE	NOB#
P1A	LEVEL	4486		P32	
P1B	LEVEL	4486		P32	
P1C	LEVEL	4486		P32	
P2A	Shape	4472		P32	
P2B	Shape	4472		P32	
P2C	Shape	4472		P32	
P3A	FX Send	4471		P32	
P3B	FX Send	4471		P32	
P3C	FX Send	4471		P32	
P4	Master	4433		P32	
S1	FX Select	4189		.	.
S2	BT_Pair	3499		.	.
S3	Power	3522		.	.

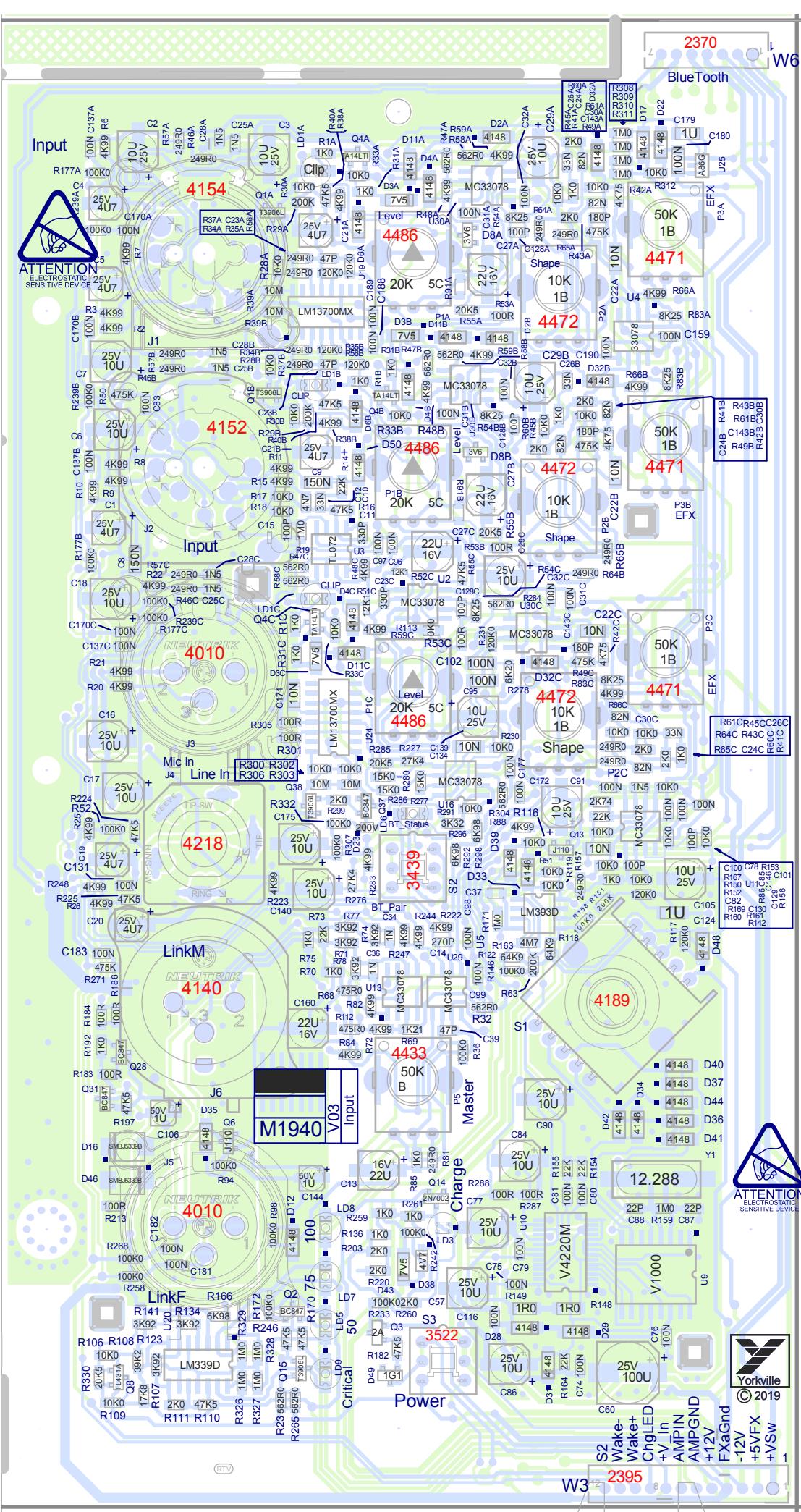


STYLE P32

THIS SHEET CONTAINS A CHANGE HISTORY LOG, A LIST OF THE POTS & KNOBS AND A LEADS & PINS REFERENCE SECTION.

BlankSi e - 234.00mmX219.00mm 92112X8622







ATTENTION
ELECTROSTATIC
SENSITIVE DEVICE

BlueTooth
V03
BlueTooth
V04
BlueTooth
V02

R4
10R0

W6_ 2370
1 BlueTooth

25V
10U

100N
C174

C126

475R0 R269

LM358D

25V
10U

475P0 R269

R95
4K99
R80
10K0

470P
10K0

10K0
470P C42
10K0 R114

R100
C41
R87

C147
C178

MC78M05B
Q18

6V3
680U

Program
W5

BM20

BM20

U17

100N
C173

TCM809
Q17

PCB ASSEMBLY DOCUMENTATION

SPECIAL PRODUCTION NOTES

EXM 70 EXM Mobile 12 Heatsink ig.



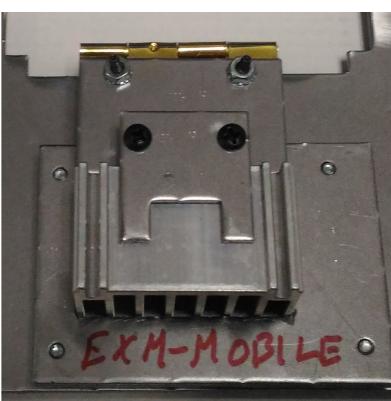
1 Place the EXM Mobile guide on the ig.



2 Place the 6698 heatsink in the guide.

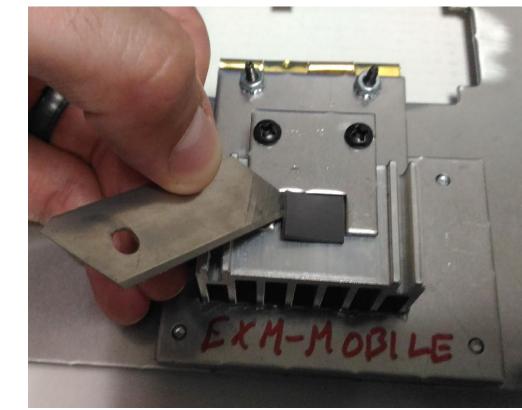


3 Flip the guide for the 4236 pad onto the heatsink .



Heatsink Assembly PCB Finishing

4 Place the 4236 pad onto the heatsink . Handle the 4236 pad by the edges only.



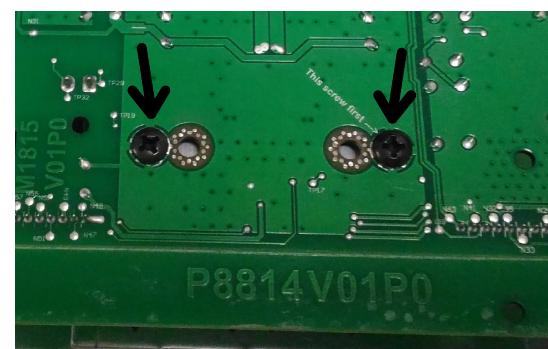
5 Flip the pad guide out of the way.



6 Place M1639 face down on the ig. Pin at the top corners.



7 Mount 6698 using 2 8807 screws. Dip the screws in loctite. Tig ten to 4 in lbs.



T input t n n t
B t t B Bn
pB t u t
t

Dip each screw in Loctite. Cover 2 threads.

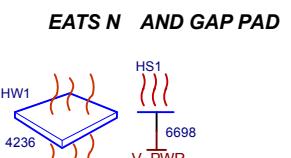
PCB HARDWARE

SCREWS AND BOLTS



NUTS

STANOFFS



THIS SHEET CONTAINS SPECIAL PRODUCTION NOTES AND A LIST OF PCB HARDWARE PARTS REQUIRED FOR THE BUILD.



Section: Assembly Documentation

Product(s): EXMmobile12

PCB#: M1914 Rev#: V03 EML Rev#: 01 Sheet 17 Of 20

Modified: 2020-11-23 File: Assembly.SchDoc Tmp Rev: V031

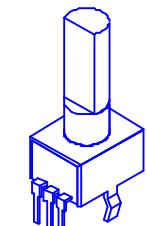
DESIGN HISTORY AND INFORMATION

CHANGE HISTORY

#	DATE	VER#	PC#	DESCRIPTION OF CHANGE
1	06-AUG-2020	V01	.	RELEASED FOR PRODUCTION
2	18-SEP-2020	V02	9594	Multiple revisions per schematics in PC9594 pd document
3	18-NOV-2020	V03	9597	Replaced 5V regulators Q18 and Q19 7918 with 8208
4	19-NOV-2020	V03	9614	Backed off +5V copper fill and trace from mtg screw in bluetooth section.
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13

POTENTIOMETERS AND NOBS

POTENTIOMETERS & KNOBS					
REF	FUNCTION	POT S	YS#	STYLE	NOB#
P1A	LEVEL	4486		P32	
P1B	LEVEL	4486		P32	
P1C	LEVEL	4486		P32	
P2A	Shape	4472		P32	
P2B	Shape	4472		P32	
P2C	Shape	4472		P32	
P3A	FX Send	4471		P32	
P3B	FX Send	4471		P32	
P3C	FX Send	4471		P32	
P4	Master	4433		P32	
S1	FX Select	4189		.	.
S2	BT_Pair	3499		.	.
S3	Power	3522		.	.



STYLE P32

THIS SHEET CONTAINS A CHANGE HISTORY LOG, A LIST OF THE POTS & KNOBS AND A LEADS & PINS REFERENCE SECTION.

1. Channel 1&2 Inputs

The combi-jacks are optimized for mics (XLR) or a balanced line level (1/4-inch) source on channel 1 or instrument level on channel 2. For condenser mics, 12V of phantom power is present on the XLR portion of the jack.

2. Channel 3 Input

Equipped with an XLR jack (optimized for mics), an unbalanced TRS 1/8-inch phone jack (or portable media players) and Bluetooth™. For condenser mics, 12V of phantom power is present on the XLR portion of the jack.

Note: When Bluetooth™ is used the volume is controlled by Channel 3's Level control.

3. Bluetooth™

The Yorkville EXM Mobile is capable of receiving streaming audio over Bluetooth™ from devices such as smart phones, tablets and laptops.

Pairing: For 'Pairing' depress the Pairing Button for 4 seconds and then release.

Status: Slow blinking indicates pairing mode while fast blinking indicates an available, unpaired connection. A steady (solid) blue light indicates it's paired and audio is available to Channel 3.

Note: When connected with Bluetooth™, ALL audio is streamed from your device. If you don't want your streaming music to be interrupted, turn off 'notifications' on your device.

4. Channel Level Controls

Use this control to adjust the channel's level in the overall system mix.

5. Channel Shape Controls

Setting towards 'Music' shapes the response for



EXM Mobile

EXM Mobile + EXM Mobile12

reproducing prerecorded music while setting the control towards 'Speech' accentuates the mid-frequencies helping speech and vocals. The response is flat in the center position.

6. Channel Effects Controls

This control determines how much of the selected effect is applied to the corresponding channel.

7. Master Control

The Master Control is used to set the overall level of the Yorkville EXM Mobile.

8. Effects Selector

Three effects are available as well as an off (no-effects) position. The effects are Delay, Hall Reverb and Room Reverb. The selected effect is available to all 3 input channels, the amount of effect applied is controlled by the individual channel's effects knob.

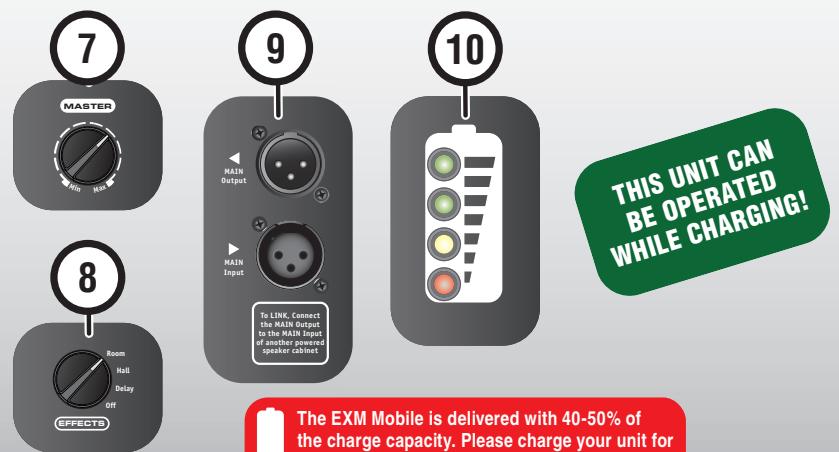
Note: If effects are not in use, set this switch to the off position to help conserve battery life..

9. Link Jacks

To use the Link feature, insert a standard XLR patch cable between cabinets. Then EXM Mobile cabinets are linked, ALL mixer inputs are sent to ALL speakers.

10. Battery Status Indicators

The status LEDs (green, green, yellow, and red) indicate the approximate charge level. The upper green LED is illuminated if there's greater than 85% charge. The red LED begins to blink if the battery is critically low (approx. 10% remaining).



The EXM Mobile is delivered with 40-50% of the charge capacity. Please charge your unit for 5-hours prior to initial battery operation!

To get the full Owner's Manual please visit our website at
<http://www.yorkville.com/manuals/> or, if you need a printed version call 905-837-8777

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4625 Witmer Industrial Estate
Niagara Falls, New York
14305 USA

The indicators will be engaged only when the power switch is turned on.

11. Low-Power "Sleep" State

To preserve battery life, the unit is equipped with "sleep" modes. These modes are automatic and nearly undetectable when configured properly. To ensure the sleep states do not interfere with normal operation, the EXM Mobile should be set up with channel gains set as high as possible (just below clipping) and the output level should be set with the Master control.

12. Charging Indicator

When AC is connected to the unit, the charging indicator will be turned on. If it's green, the unit is fully charged. If it's red, the unit is in the process of charging.

13. Charging the EXM Mobile

To charge the EXM Mobile, plug it into an AC power source using the included power cord. The charging indicator LED displays the status; even if all of the status LEDs are lit, there is still possibly additional charging time required.

The EXM Mobile can be safely left connected to AC power for charging indefinitely. It will intelligently control its own charging regime when plugged in long-term.

If the EXM Mobile is going to be unused for longer than one month, it is advisable to periodically plug it in to charge up the battery. If stored for a long period unused and not maintained, it is advisable to connect the charger and leave it plugged in for approximately 24 hours.

The EXM Mobile will not charge when the temperature is below 0° C or above 45° C.

1. Entrées des Canaux 1 et 2

Les combi-jacks sont optimisés pour les micros (XLR) ou une source de niveau ligne symétrique (1/4 pouce) sur le canal 1 ou niveau d'instrument sur le canal 2. Pour les micros à condensateur, une alimentation fantôme de 12 V est présente sur la partie XLR de la prise.

2. Entrée du Canal 3

Equipée d'une prise XLR (optimisée pour les microphones), une prise asymétrique TRS 1/8 «pour les lecteurs multimédia portables» et Bluetooth™. Pour les micros à condensateur, une alimentation fantôme de 12 V est présente sur la partie XLR de la prise.

Remarque: Lorsque Bluetooth™ est utilisé, le volume est contrôlé par la commande de niveau du Canal 3.

3. Bluetooth™

Le EXM Mobile de Yorkville est capable de recevoir de l'audio en streaming via Bluetooth™ à partir de dispositifs tels que les téléphones intelligents, les tablettes et les ordinateurs portables.

Jumelage: Pour jumeler, appuyez sur le bouton Pairing pendant 4 secondes, puis relâchez.

État: Le clignotement lent indique le mode de jumelage tandis que le clignotement rapide indique une connexion disponible, non jumelée. Une lumière bleue fixe indique qu'il est jumelé et l'audio est disponible pour le canal 3.

Remarque: lorsque vous êtes connecté avec Bluetooth™, TOUT audio est diffusé par votre appareil. Si vous ne voulez pas que votre musique soit interrompu, désactivez les "notifications" sur votre appareil.

4. Commandes de Niveau des Canaux

Utilisez cette commande pour ajuster le niveau du canal dans l'ensemble du mélange du système.

5. Commande "SHAPE" de Canal

La position «Music» ajuste la réponse pour une



EXM Mobile

EXM Mobile + EXM Mobile12

Bluetooth™

meilleure reproduction de la musique préenregistrée, tandis que la position «Speech» accentue les fréquences moyennes qui favorisent la voix et le chant. La réponse en fréquence est uniforme quand le sélecteur est à la position centrale.

6. Commande "EFFECTS" de Canal

Cette commande détermine la quantité de l'effet sélectionné qui est appliquée au canal correspondant.

7. Commande "MASTER"

La commande MASTER est utilisée pour définir le niveau global du EXM70 de Yorkville.

8. Sélecteur "EFFECTS"

Trois effets sont disponibles ainsi qu'une position désactivée (sans effet). Les effets sont Delay, Hall Reverb et Room Reverb. L'effet sélectionné est disponible aux 3 canaux d'entrée, la quantité d'effet appliquée est contrôlée par la commande EFFECTS de chaque canal.

Remarque: Si les effets ne sont pas utilisés, réglez ce sélecteur à la position OFF pour aider à préserver l'autonomie de la batterie.

9. Prises LINK

Pour utiliser la fonction Link, insérez un câble de raccordement XLR standard entre les enceintes. Lorsque les enceintes EXM Mobile sont reliées, TOUTES les entrées du mixeur sont envoyées à TOUTES les enceintes.

10. Indicateurs d'État de la Batterie

Les DEL d'état (vert, vert, jaune et rouge) indiquent le niveau de charge approximatif. La DEL verte supérieure est allumée si la charge est supérieure à 85%. La DEL rouge commence à clignoter si la batterie est très faible (environ 10% restant).

Les indicateurs ne seront activés que lorsque l'interrupteur d'alimentation sera allumé.

11. Etat "SLEEP" de Faible Puissance

Pour préserver la durée de vie de la batterie, l'appareil est équipé de modes «SLEEP». Ces modes sont automatiques et presque indétectables lorsqu'ils sont configurés correctement. Pour s'assurer que les états SLEEP n'interfèrent pas avec le fonctionnement normal, l'EXM Mobile doit être configuré avec des gains de canal aussi élevés que possible (juste en dessous de l'écrêtage) et le niveau de sortie doit être réglé avec la commande MASTER

12. Indicateur de Charge

Lorsque le courant alternatif est connecté à l'appareil, l'indicateur de charge s'allume. S'il est vert, l'appareil est entièrement chargé. S'il est rouge, l'unité est en cours de chargement.

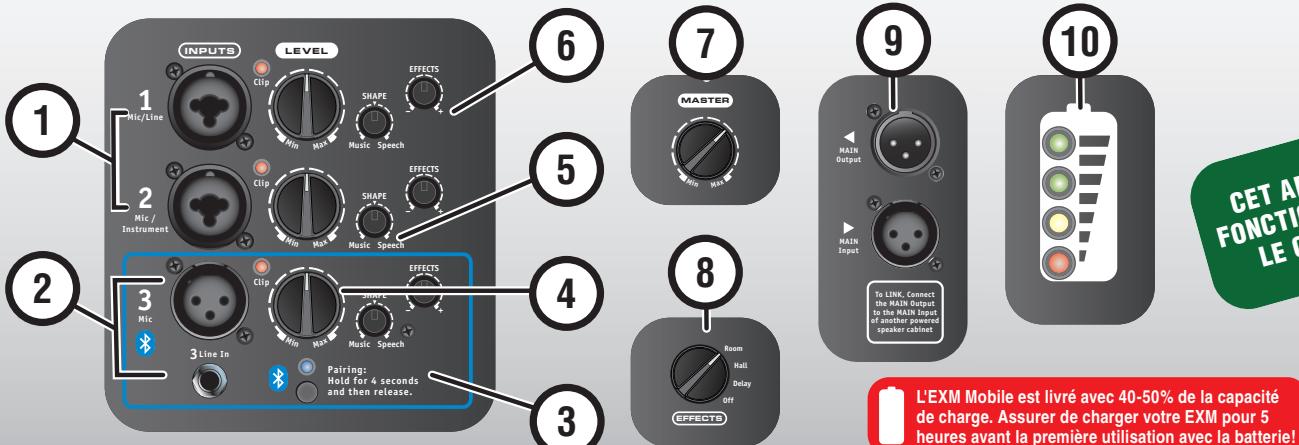
13. Chargement du EXM Mobile

Pour charger l'EXM Mobile, branchez-le sur une source d'alimentation CA à l'aide du cordon d'alimentation fourni. L'indicateur de charge à DEL affiche l'état; Même si tous les DEL d'état sont allumés, il est possible que du temps de charge additionnel soit nécessaire.

L'EXM Mobile peut être laissé en toute sécurité connecté à l'alimentation secteur pour une recharge indéfinie. Il contrôlera intelligemment son propre régime de recharge lorsqu'il sera branché à long terme.

Si vous prévoyez ne pas utiliser le EXM Mobile pendant plus d'un mois, il est conseillé de le brancher périodiquement pour recharger la batterie. S'il est stocké pendant une longue période, inutilisé et non entretenu, il est conseillé de brancher le chargeur et de le laisser brancher pendant environ 24 heures.

L'EXM Mobile / Mobile12 ne se charge pas lorsque la température est moins que 0° C ou plus que 45° C.



CET APPAREIL PEUT
FONCTIONNER PENDANT
LE CHARGEMENT!

L'EXM Mobile est livré avec 40-50% de la capacité de charge. Assurer de charger votre EXM pour 5 heures avant la première utilisation avec la batterie!

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