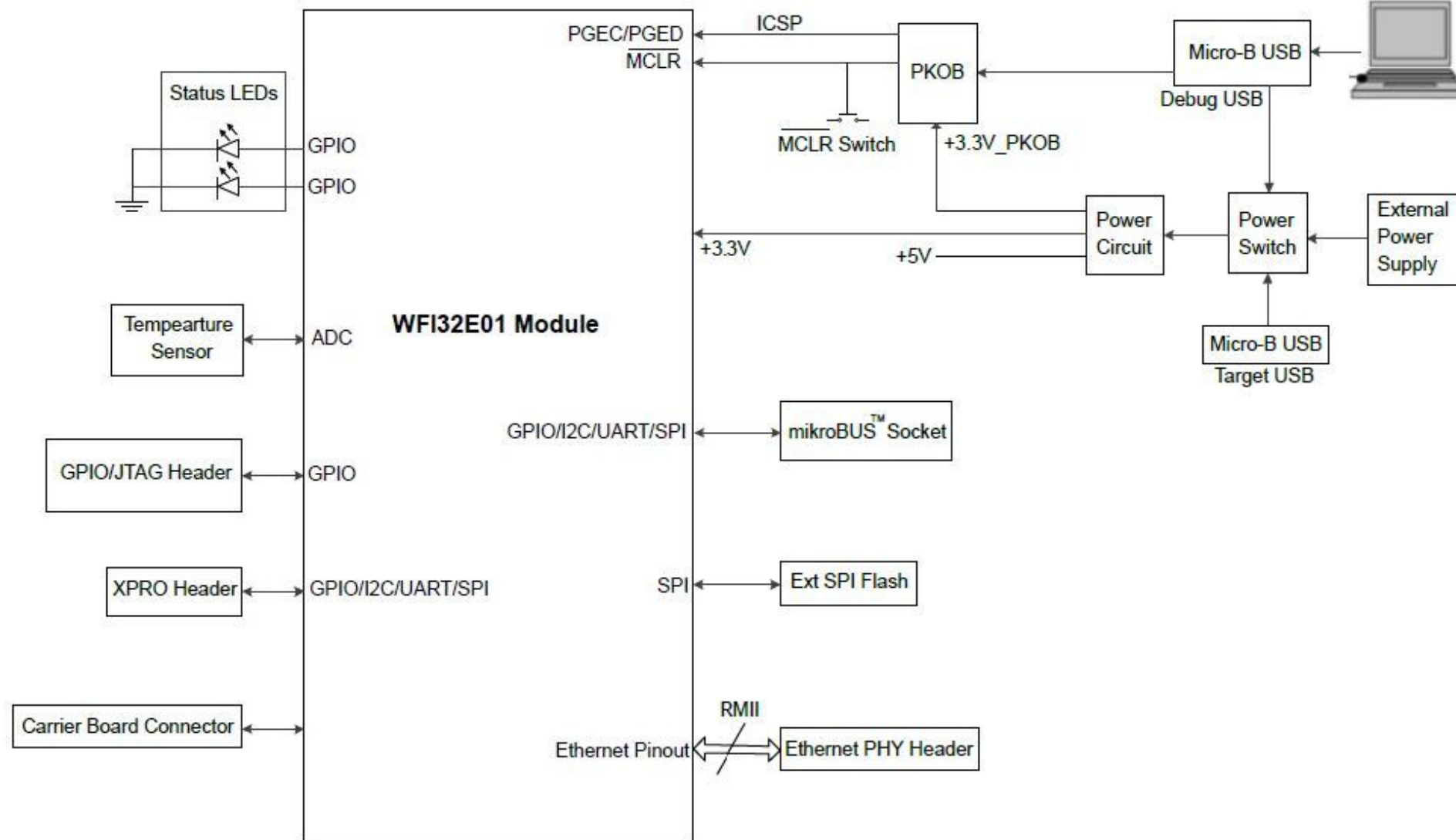
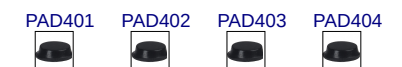




REV	ECO#	DESCRIPTION	DATE
0.1		Initial Draft_Curiosities Ver 1.0	20 FEB 2018
0.2		Review comments are updated	17 MAR 2018
0.3		Marketing team comments are updated	23 MAR 2018
2.0		EVT Design files released for fab	25 MAR 2018
2.1		R337,R338 added & J206 part changed	09 JULY 2018
2.2		R440,R441,R442,R443,R444,R445,R446 added	15 MAR 2019
2.3		Added J210,J211 Net name changes as per CVD lines Added Shunt Jumpers Removed R210	08 JAN 2020
3.0		Added JP203,JP204,JP301 Added screws and nuts Removed JP400 Net Name changed as per Carrier Board	27 FEB 2020
4.0		C304,C305,FB400,CBL2 updated with new part JP200,JP201,JP202,JP203,JP204,JP300,JP301 updated with new part	14 AUG 2020

Plastic Foot



Mounting Holes



Choose the largest label that fits on your PCB.

LABEL100



Label Need Help Large

SCR1



SCREW M3x8mm

NUT1



NUT M3x2.4mm Zinc

NUT3



NUT M3x2.4mm Zinc

SCR2



SCREW M3x8mm

NUT2



NUT M3x2.4mm Zinc

NUT4

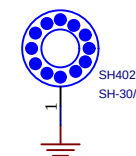
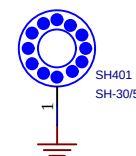


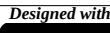
NUT M3x2.4mm Zinc

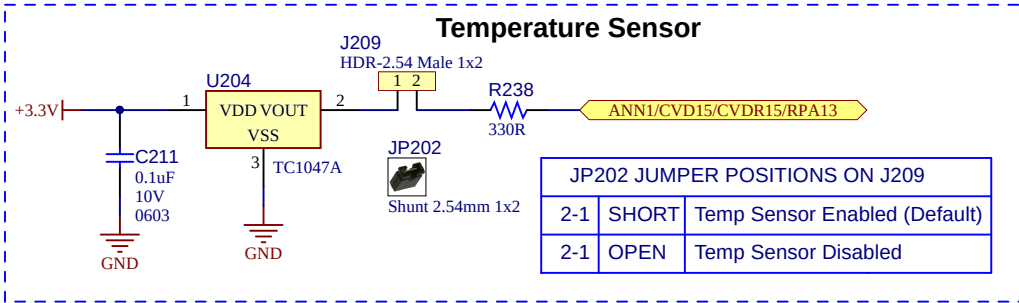
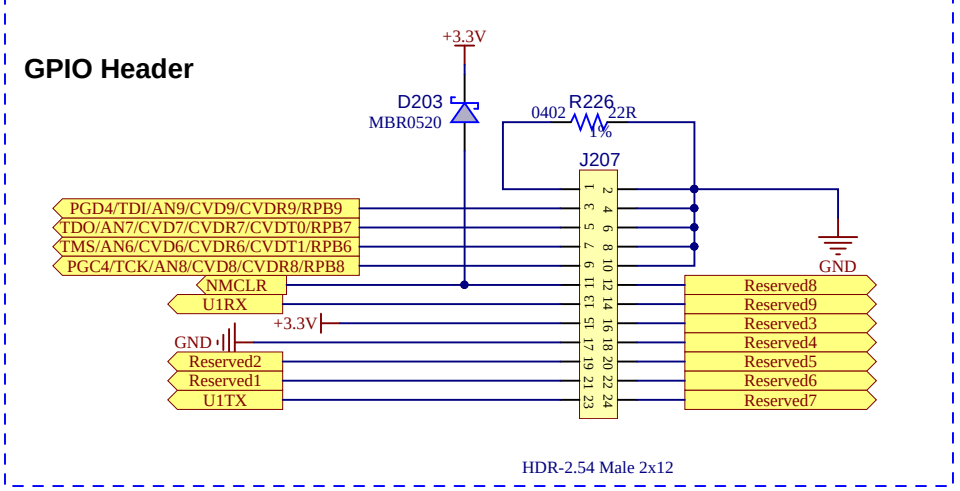
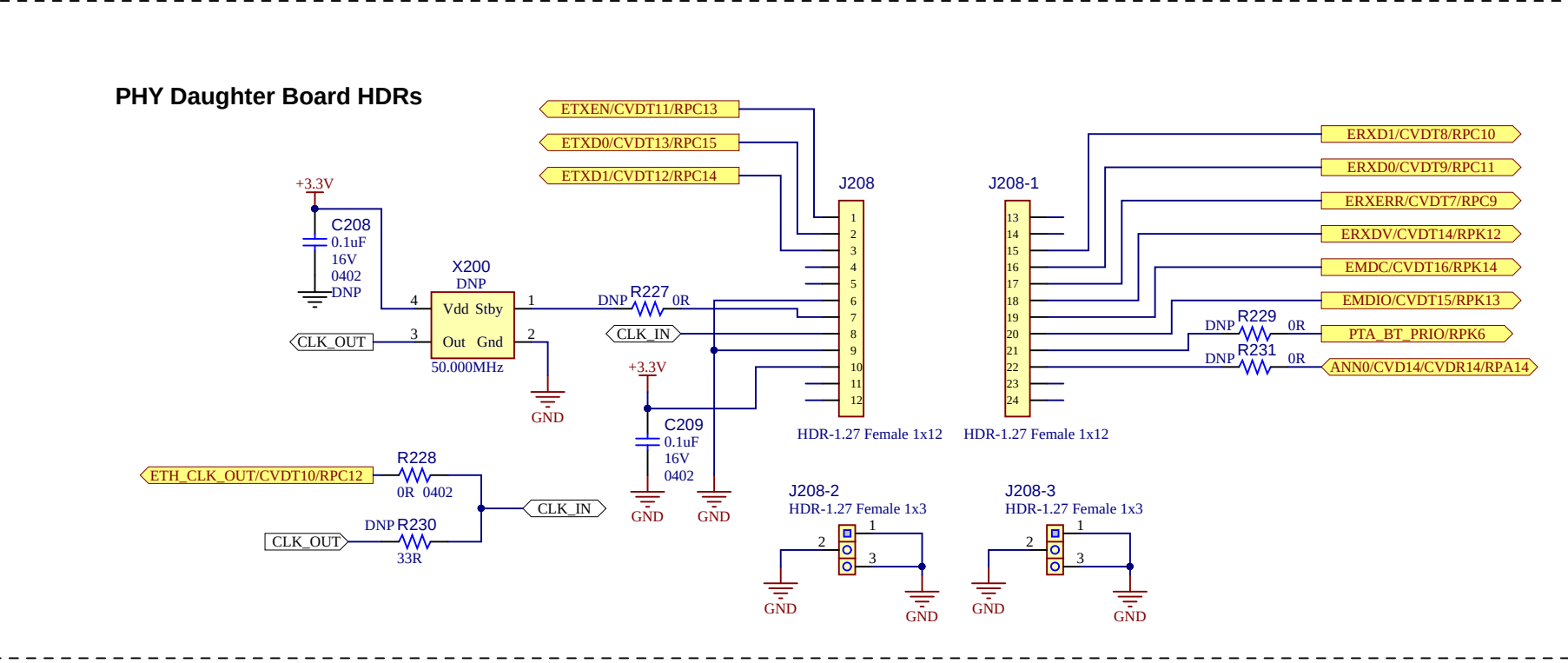
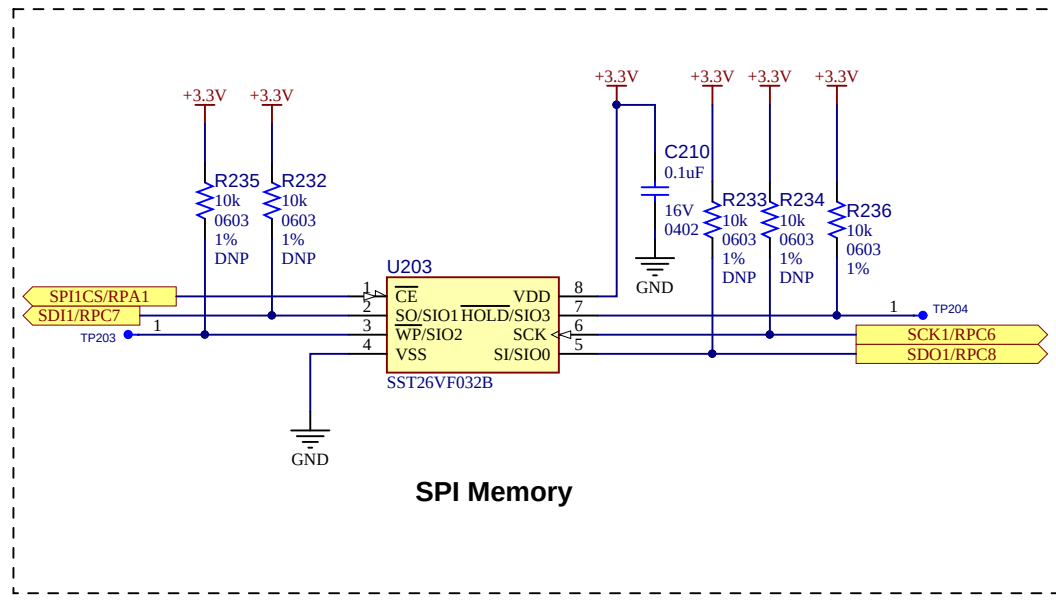
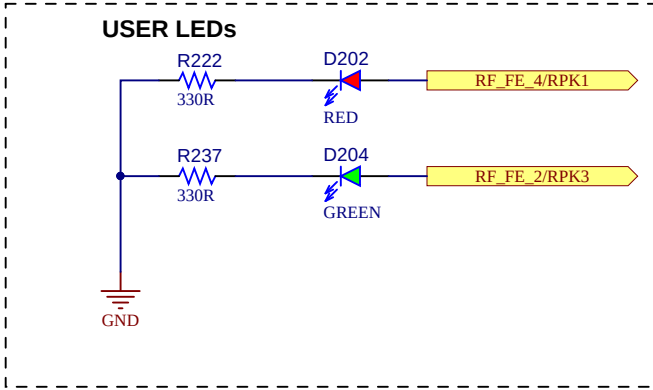
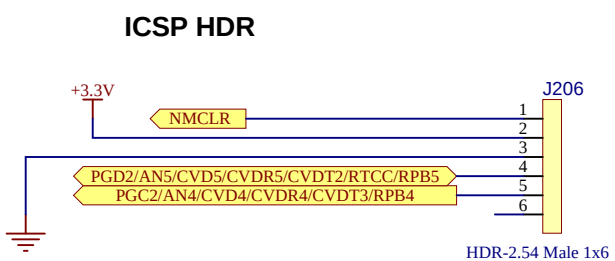
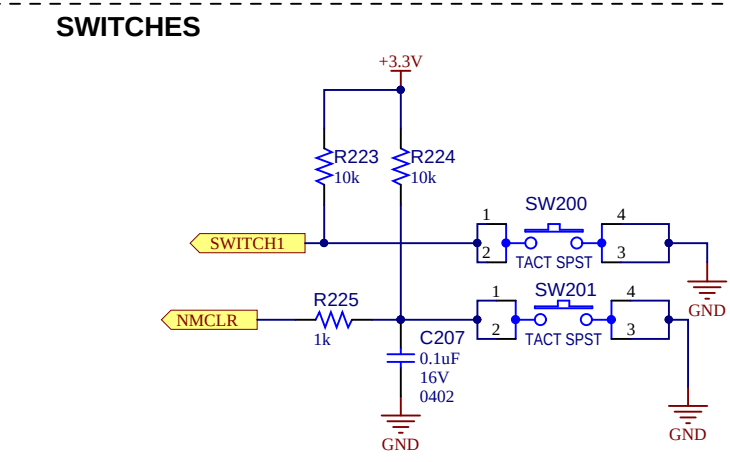
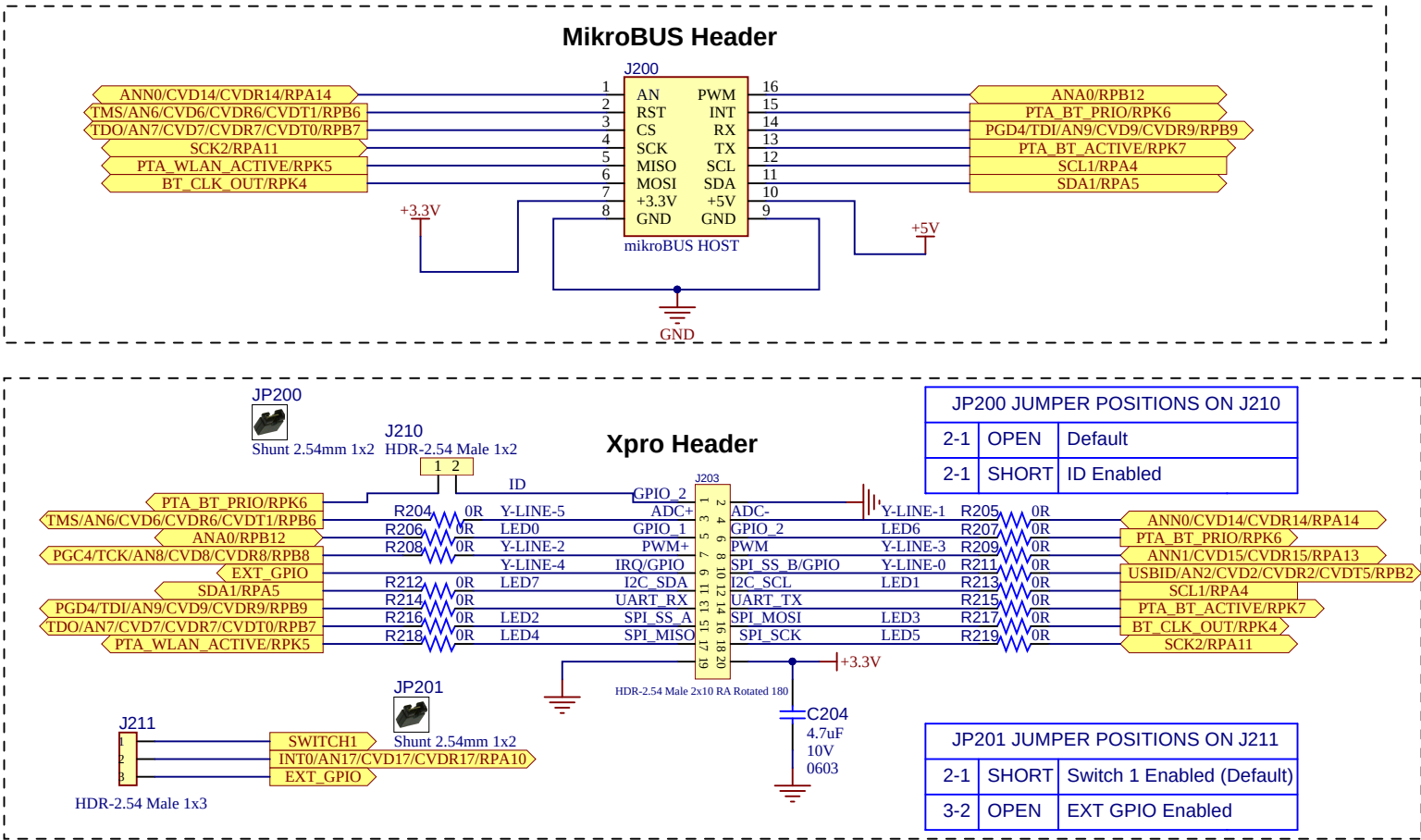
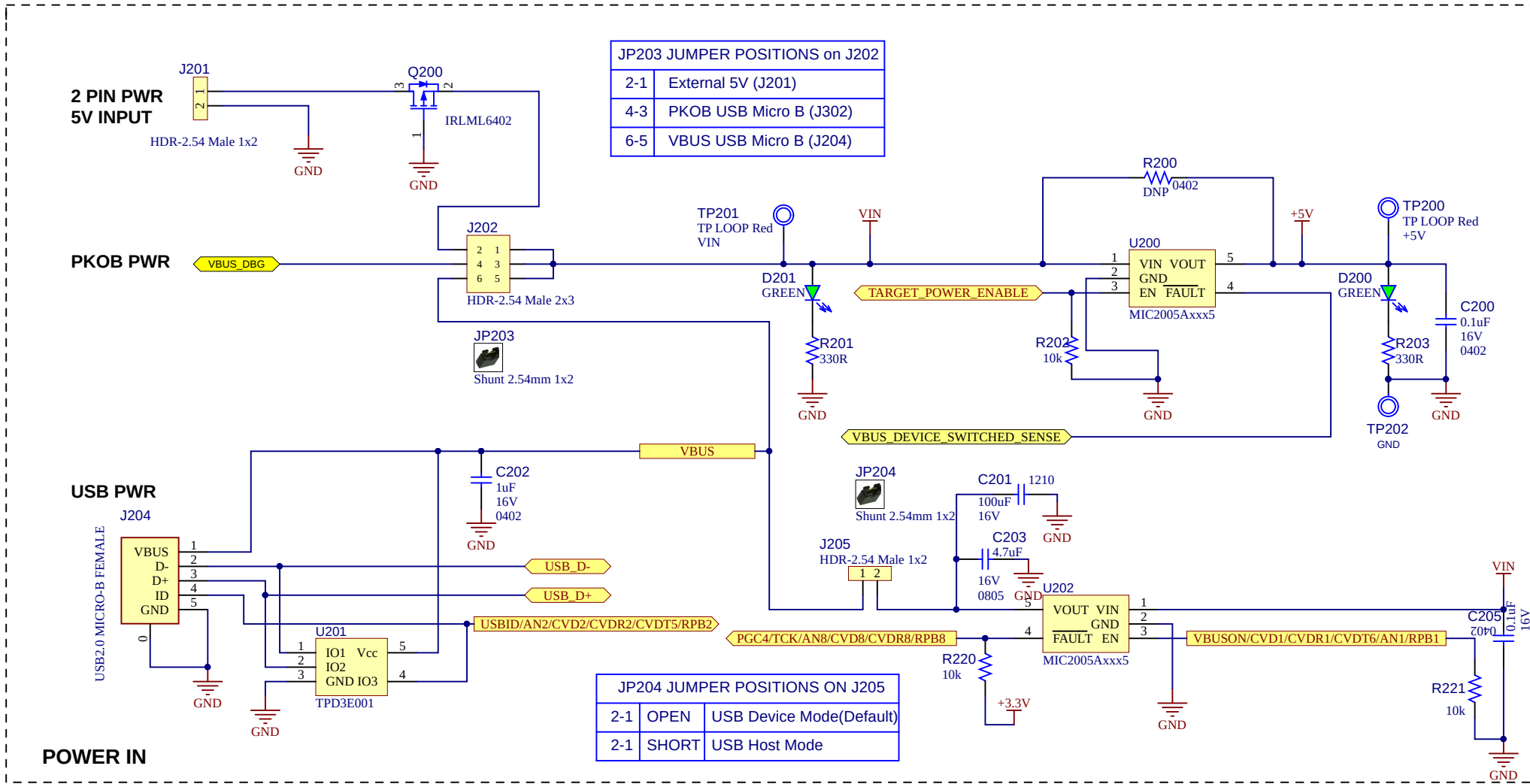
CBL2



USB Male-A to Male Micro-B



Drawn By: Chandan Kumar MN		 MICROCHIP	
Engineer: Chandan Kumar MN			
PartNumber: EV12F11A		Project Title	Variant: [No Variations]
		<i>PIC32 WFI32E Curiosity Board</i>	
Sheet Title Block Diagram			Designed with  Altium.com
Size B	SCH #: 03-11134 PCB #: 04-11134	Rev: 4.0 Rev: 4.0	Date: 8/21/2020 Sheet 1 of 4
File: 01-Block Diagram.SchDoc			



Drawn By: Chandan Kumar MN
Engineer: Chandan Kumar MN

PartNumber: EV12F11A
PCB #: 04-11134

Project Title: **PIC32 WFI32E Curiosity Board**
Variant: [No Variations]

Sheet Title: **Power And Interface Section**

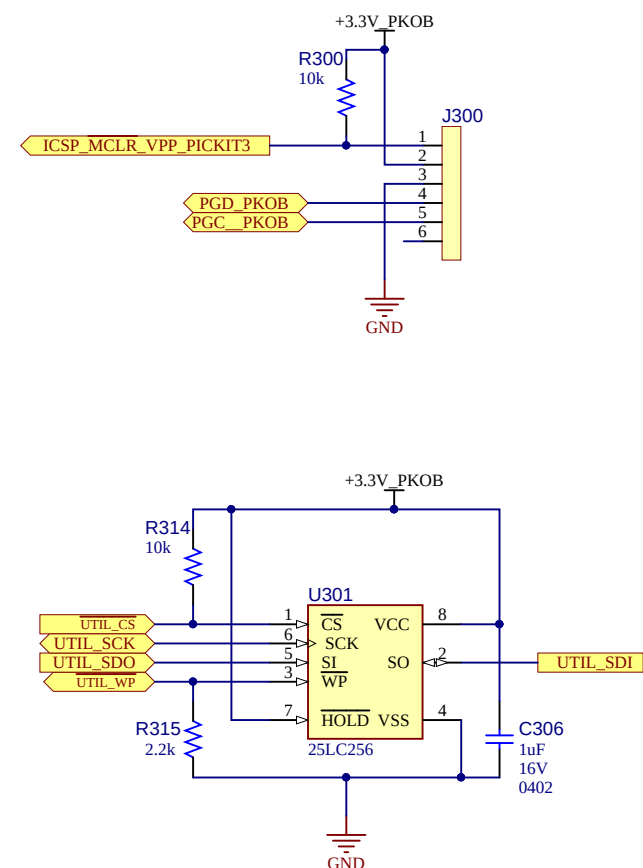
Size: C
SCH #: 03-11134
Rev:4.0
Date: 8/21/2020
Rev:4.0
Sheet 2 of 4

File: 02-Power And Interface Section.SchDoc

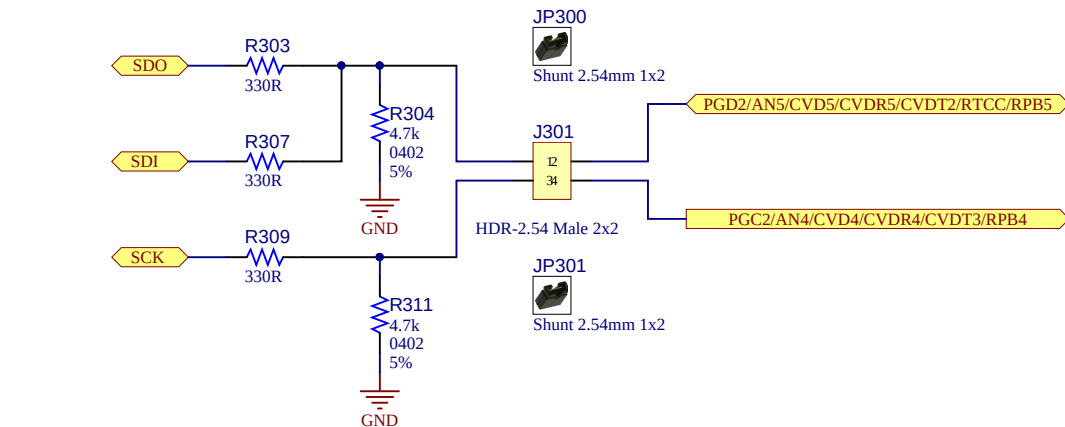
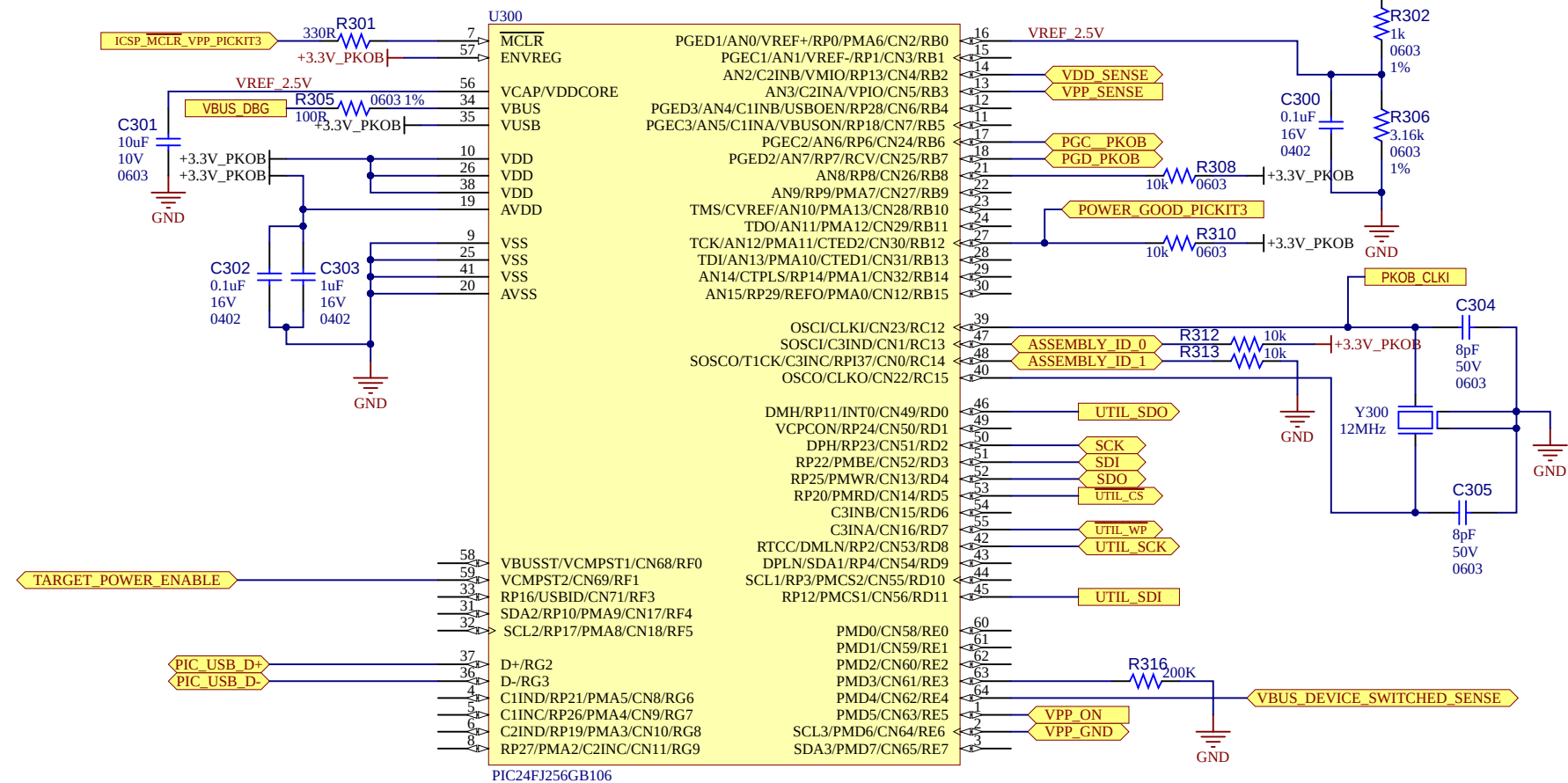
MICROCHIP

Altium

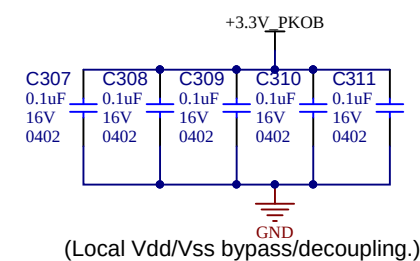
PICKit On Board-3



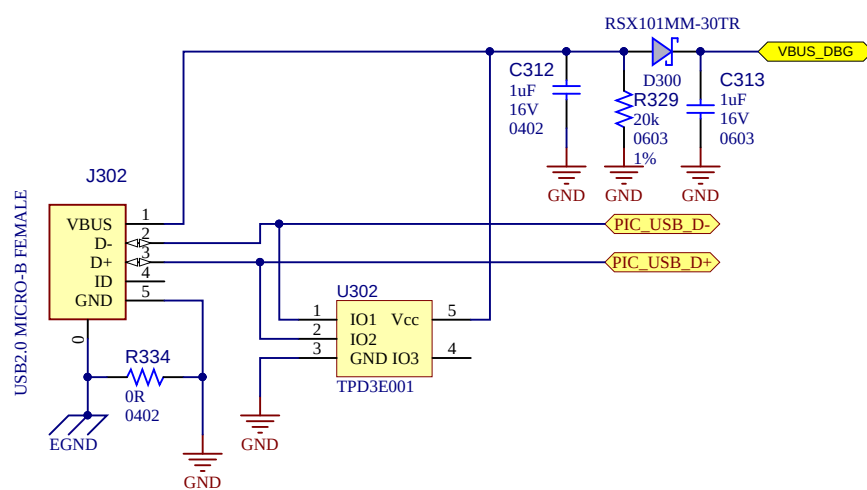
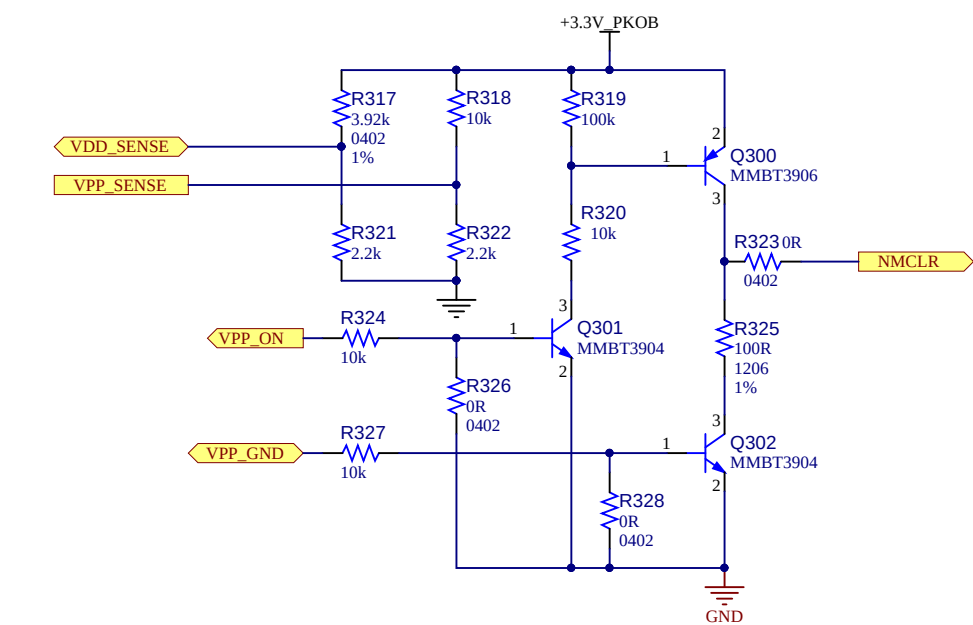
SERIAL EEPROM (25LC256)



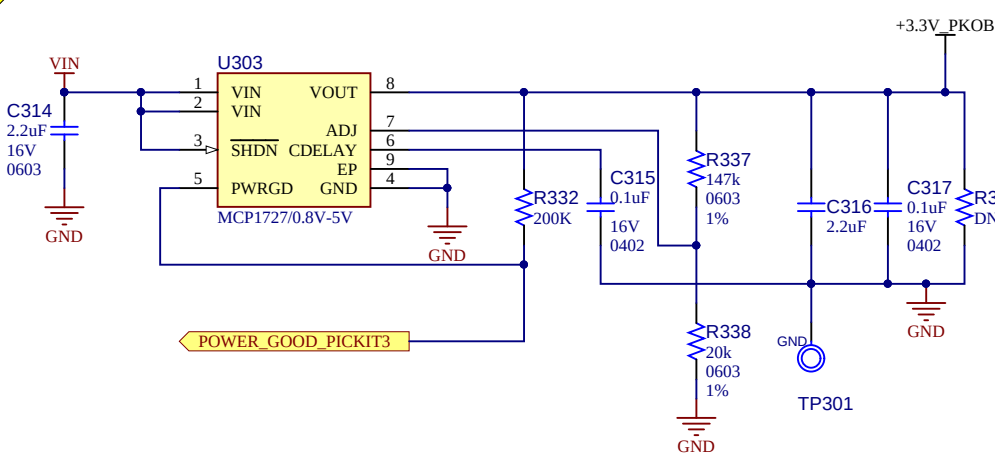
J300 Jumper Positions		J301 Jumper Positions	
PKOB Mode	REAL ICE Mode	PKOB Mode	REAL ICE Mode
pins 1-2: Shorted	pins 1-2: Open	pins 3-4: Shorted	pins 3-4: Open



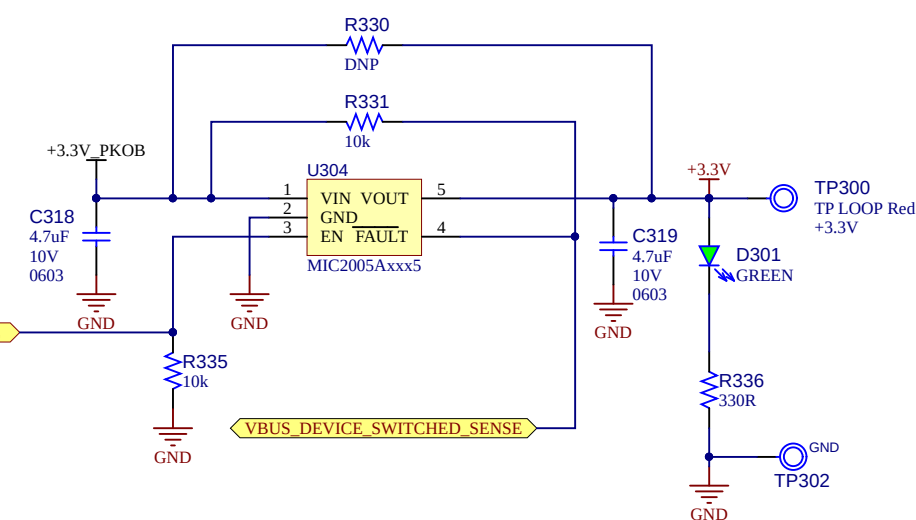
(Local Vdd/Vss bypass/decoupling.)

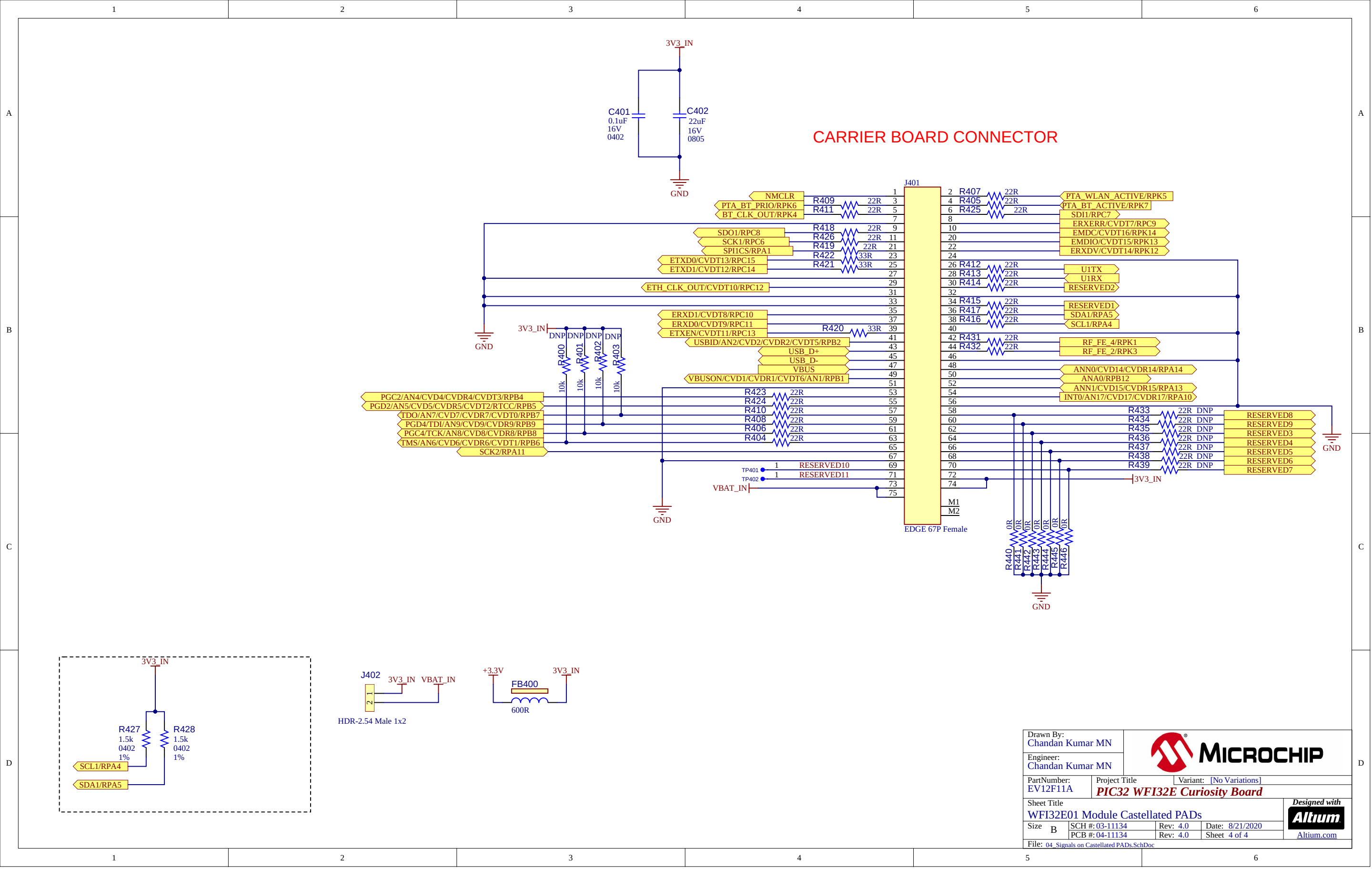


USB INTERFACE
(BUS POWERED)

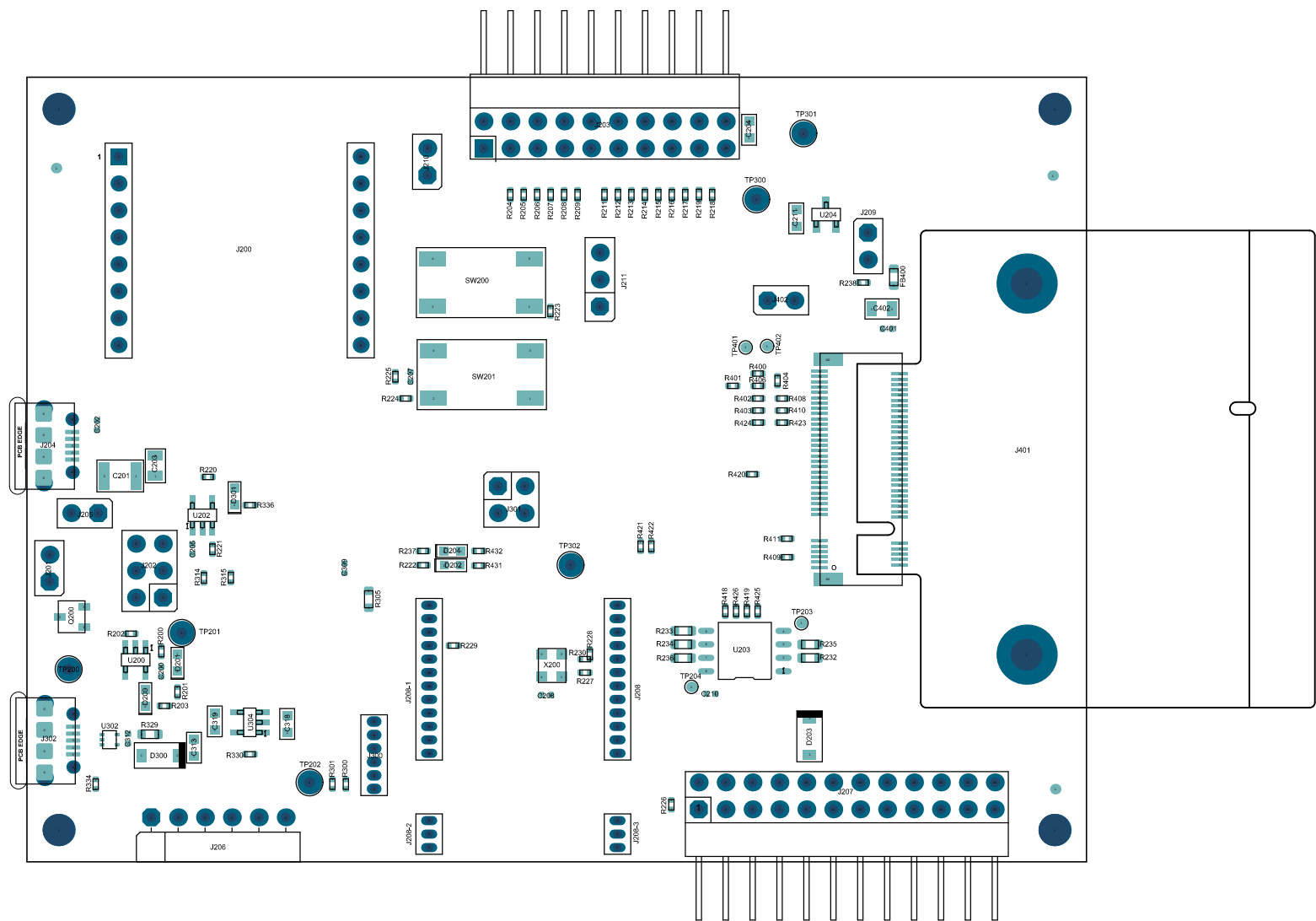


POWER DISTRIBUTION/SWITCHING





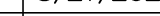
REV	ECO	Comments	Date

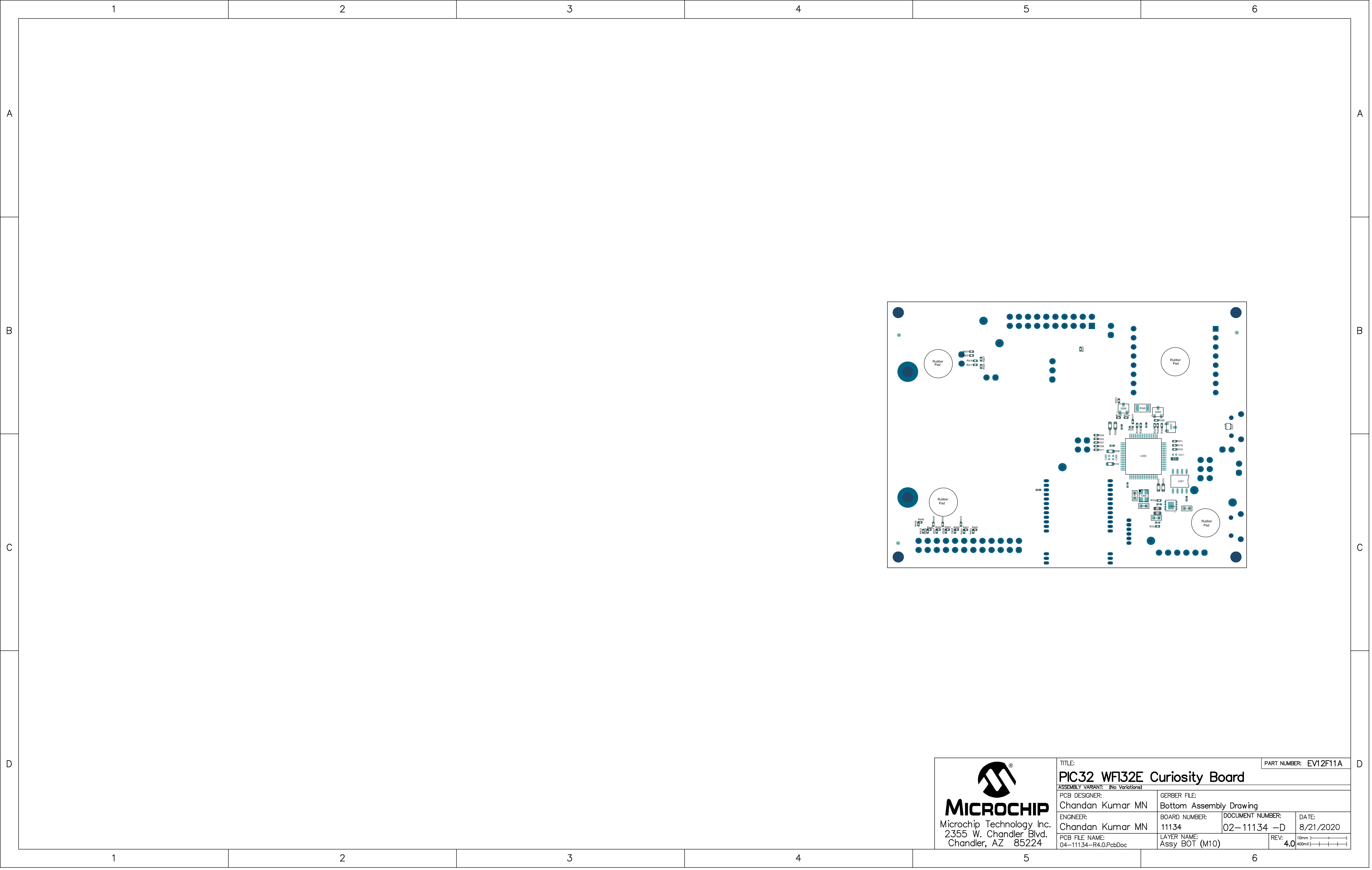


ASSEMBLY NOTES:

1. ALL COMPONENTS SHALL BE RoHS COMPLIANT.
2. ALL UNUSED THROUGH HOLE COMPONENT LOCATIONS SHALL BE FREE OF SOLDER.
3. ALL COMPONENTS SHALL BE MOUNTED FLUSH TO THE BOARD, EXCEPT AS NOTED.
4. FINISHED BOARD SHALL BE FREE OF ALL RESIDUES.
5. ALL LEADS SHALL BE TRIMMED TO A MAXIMUM HEIGHT OF 2mm
6. PLACE LABEL ON THE LOCATION INDICATED.



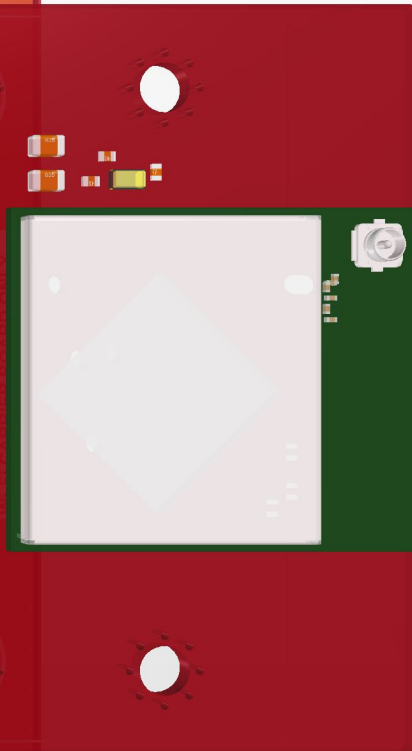
TITLE: PIC32 WF132E Curiosity Board		PART NUMBER: EV12F11A	
ASSEMBLY VARIANT: [No Variations]			
PCB DESIGNER: Chandan Kumar MN		GERBER FILE: Top Assembly Drawing	
ENGINEER: Chandan Kumar MN		BOARD NUMBER: 11134	DOCUMENT NUMBER: 02-11134 -D
		DATE: 8/21/2020	
PCB FILE NAME: 04-11134-R4.0.PcbDoc		LAYER NAME: Assy TOP (M11)	REV: 4.0
			





MICROCHIP
Microchip Technology Inc.
2355 W. Chandler Blvd.
Chandler, AZ 85224

TITLE: PIC32 WF132E Curiosity Board				PART NUMBER: EV12F11A
ASSEMBLY VARIANT: No Variations1				
PCB DESIGNER: Chandan Kumar MN	GERBER FILE: Bottom Assembly Drawing			
ENGINEER: Chandan Kumar MN	BOARD NUMBER: 11134	DOCUMENT NUMBER: 02-11134 -D	DATE: 8/21/2020	
PCB FILE NAME: 04-11134-R4.0.PcbDoc	LAYER NAME: Assy BOT (M10)	REV: 4.0	10mm 400mil	



mikro
BUS

PWM
INT
RX
TX
SCL
SDA
+5V
GND

AN
RST
CS
SCK
MISO
MOSI
+3.3V
GND

PAD401

PAD402

PAD404

PAD403

R438 R445 R415
R437 R444 R414
R436 R443 R413
R435 R442 R412
R434 R441 R411
R433 R440 R410

R439
R412
R446

R231

Q300
R320
R302
R317
R325
R319
R321

Q302

R328

R318

R322

C308

R327

R324

R326

Q301

R304
R303
R307
R309
R311

C307
R308
C302
R310

U300

R331

R316

R335

C311

C301

C310
C304
C305

Y300
R312
R313

U301

C306

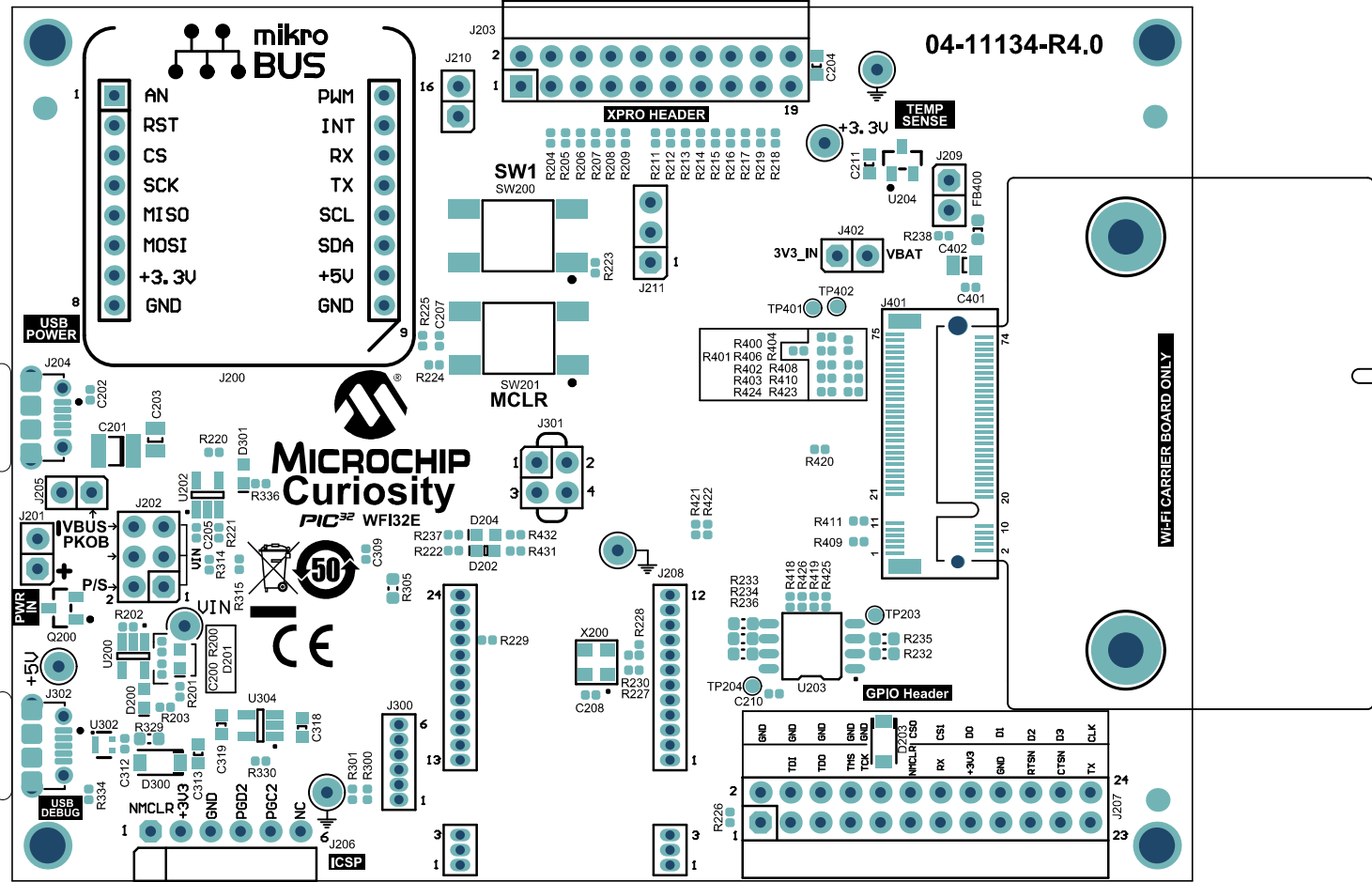
U303

C314

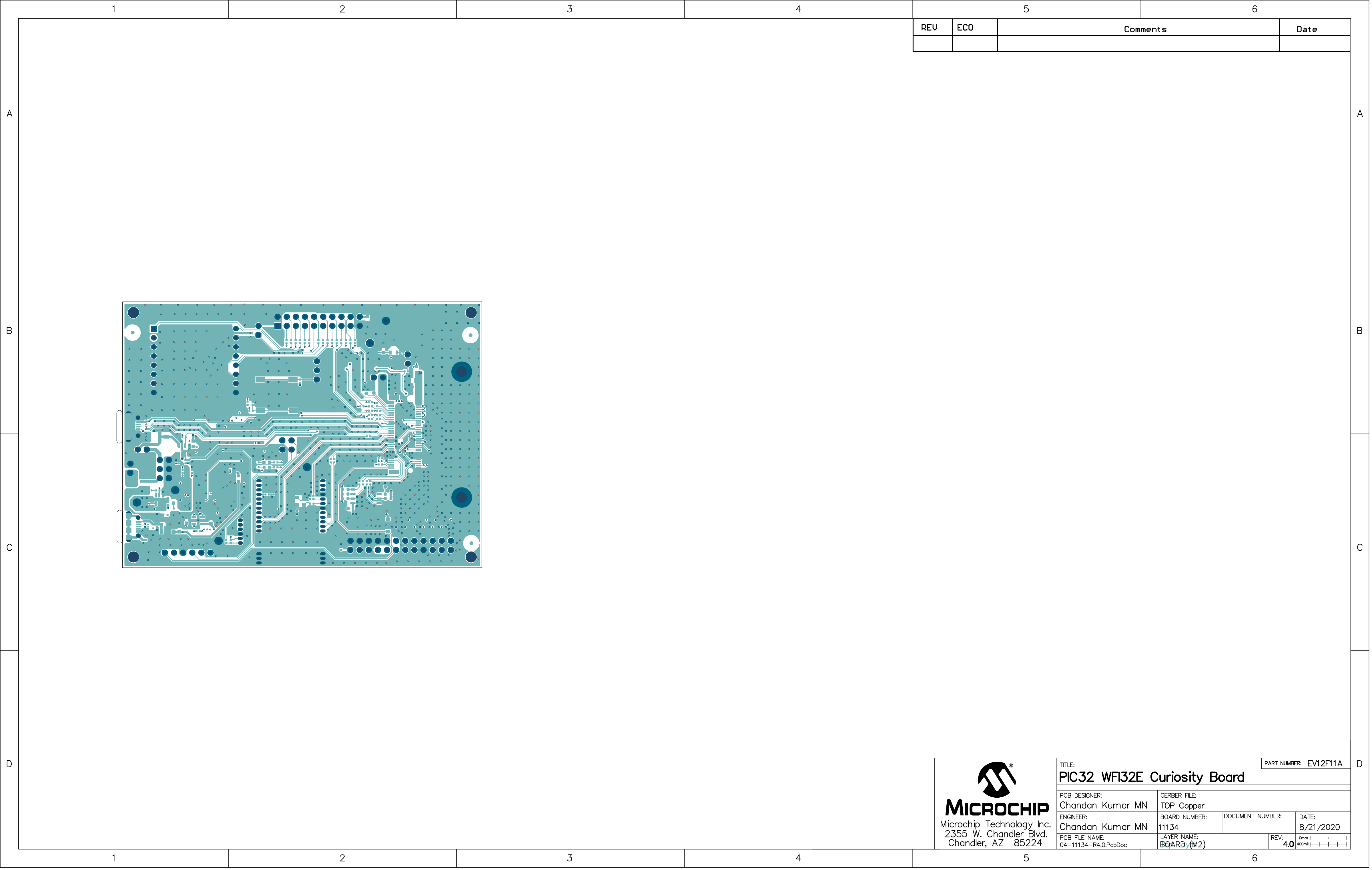
R332
C315
R338
R337
C316
C317
R333

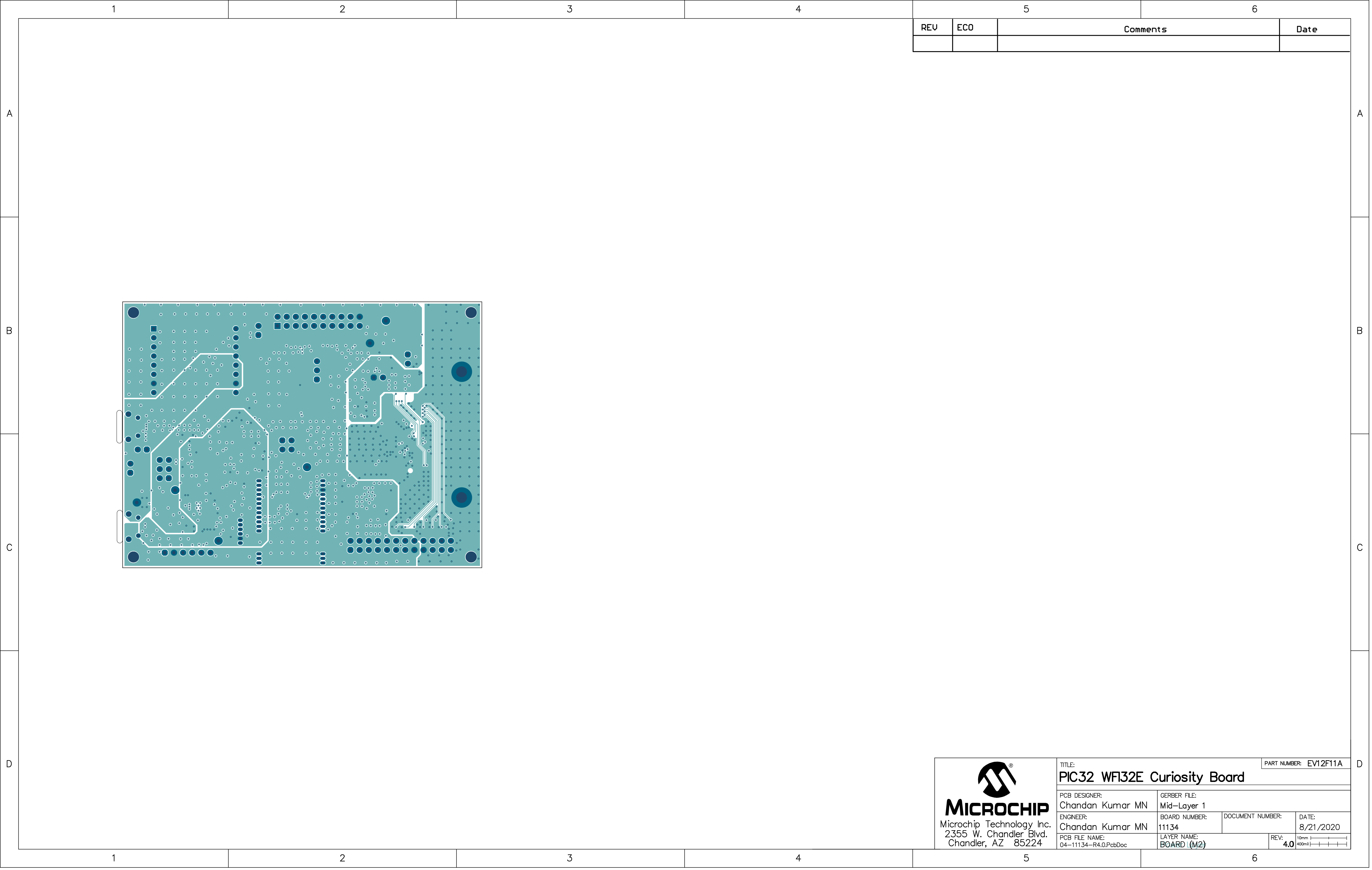
U201

REV	ECO	Comments	Date



TITLE: PIC32 WFI32E Curiosity Board				PART NUMBER: EV12F11A
PCB DESIGNER: Chandan Kumar MN	GERBER FILE: TOP Silk			
ENGINEER: Chandan Kumar MN	BOARD NUMBER: 11134	DOCUMENT NUMBER:	DATE: 8/21/2020	
PCB FILE NAME: 04-11134-R4.0.PcbDoc	LAYER NAME: Bp AR04 (12)	REV: 4.0		10mm 400mil



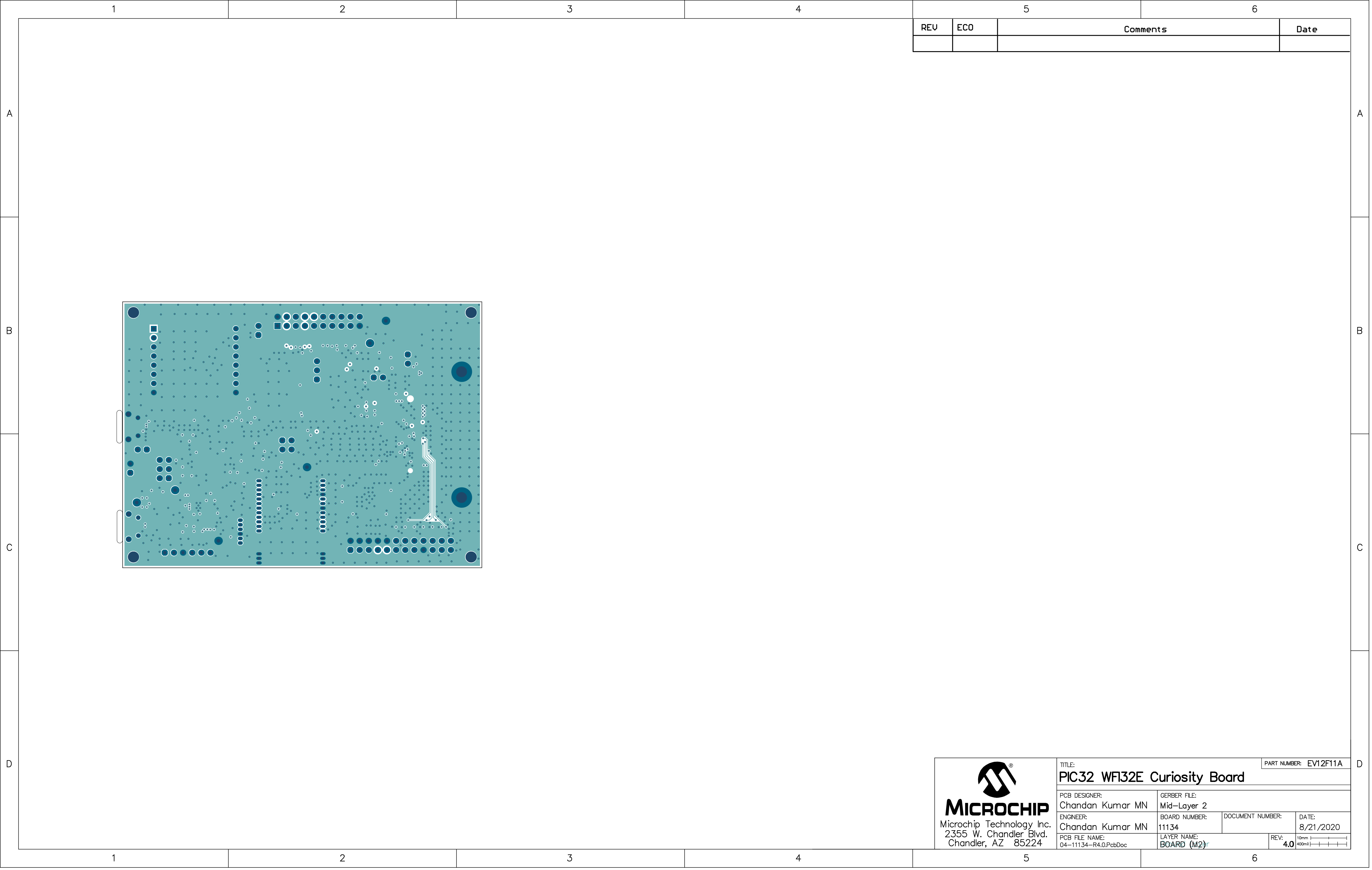


REV	ECO	Comments	Date



MICROCHIP
Microchip Technology Inc.
2355 W. Chandler Blvd.
Chandler, AZ 85224

TITLE: PIC32 WF132E Curiosity Board				PART NUMBER: EV12F11A	
PCB DESIGNER: Chandan Kumar MN		GERBER FILE: Mid-Layer 1			
ENGINEER: Chandan Kumar MN		BOARD NUMBER: 11134	DOCUMENT NUMBER:	DATE: 8/21/2020	
PCB FILE NAME: 04-11134-R4.0.PcbDoc		LAYER NAME: BOARD L(M2)		REV: 4.0	10mm 400mil

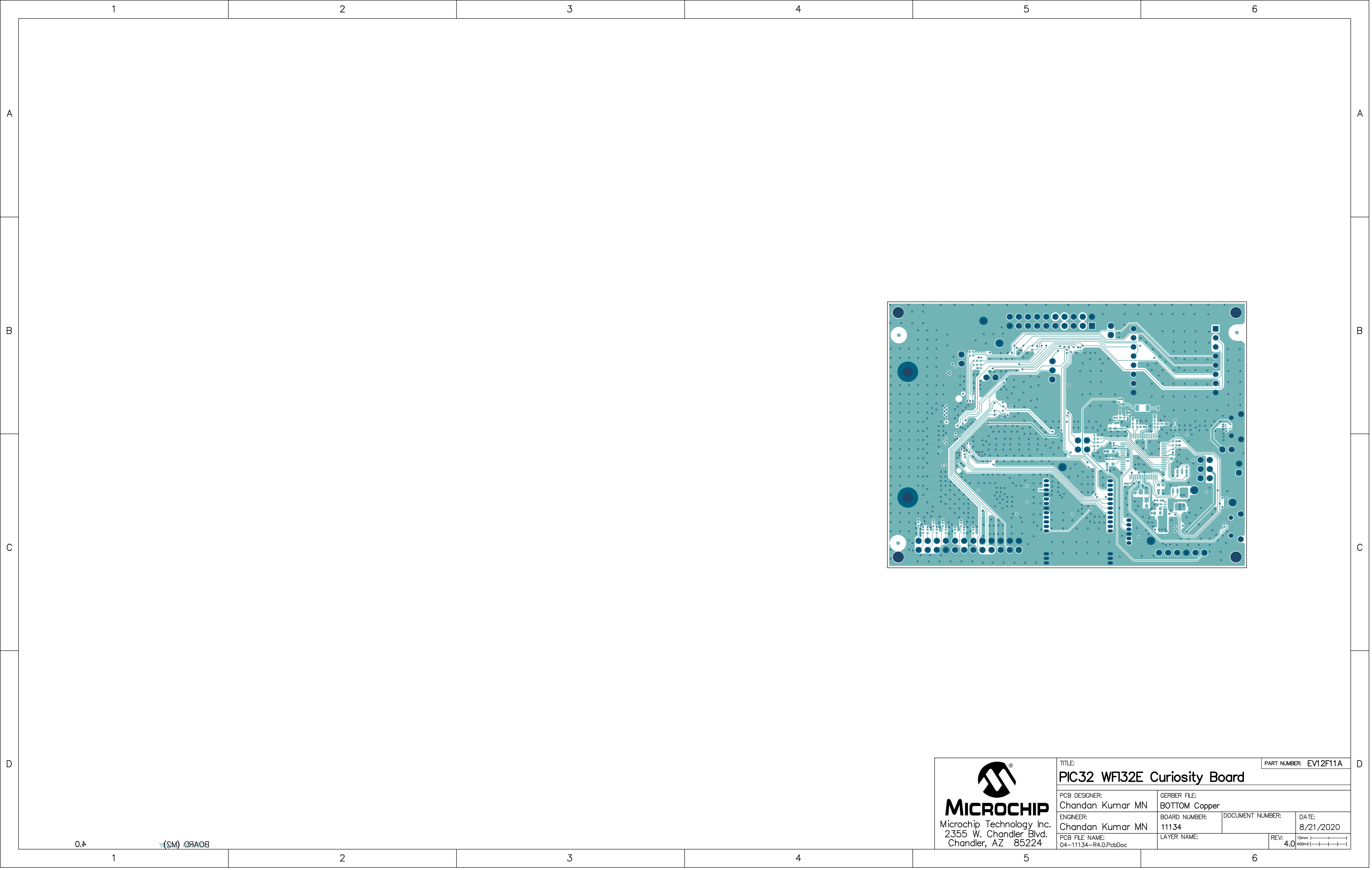


REV	ECO	Comments	Date



MICROCHIP
Microchip Technology Inc.
2355 W. Chandler Blvd.
Chandler, AZ 85224

TITLE: PIC32 WF132E Curiosity Board				PART NUMBER: EV12F11A	
PCB DESIGNER: Chandan Kumar MN		GERBER FILE: Mid-Layer 2			
ENGINEER: Chandan Kumar MN		BOARD NUMBER: 11134	DOCUMENT NUMBER:	DATE: 8/21/2020	
PCB FILE NAME: 04-11134-R4.0.PcbDoc		LAYER NAME: BOARD (M2)		REV: 4.0	10mm 400mil



0.4 (M) BOARD



MICROCHIP
Microchip Technology Inc.
2355 W. Chandler Blvd.
Chandler, AZ 85224

TITLE: PIC32 WFI32E Curiosity Board		PART NUMBER: EV12F11A	
PCB DESIGNER: Chandan Kumar MN		GERBER FILE: BOTTOM Copper	
ENGINEER: Chandan Kumar MN		BOARD NUMBER: 11134	DOCUMENT NUMBER: DATE: 8/21/2020
PCB FILE NAME: 04-11134-R4.0.PcbDoc		LAYER NAME:	REV: 4.0
			10mm 400mil

1

2

3

4

5

6

A

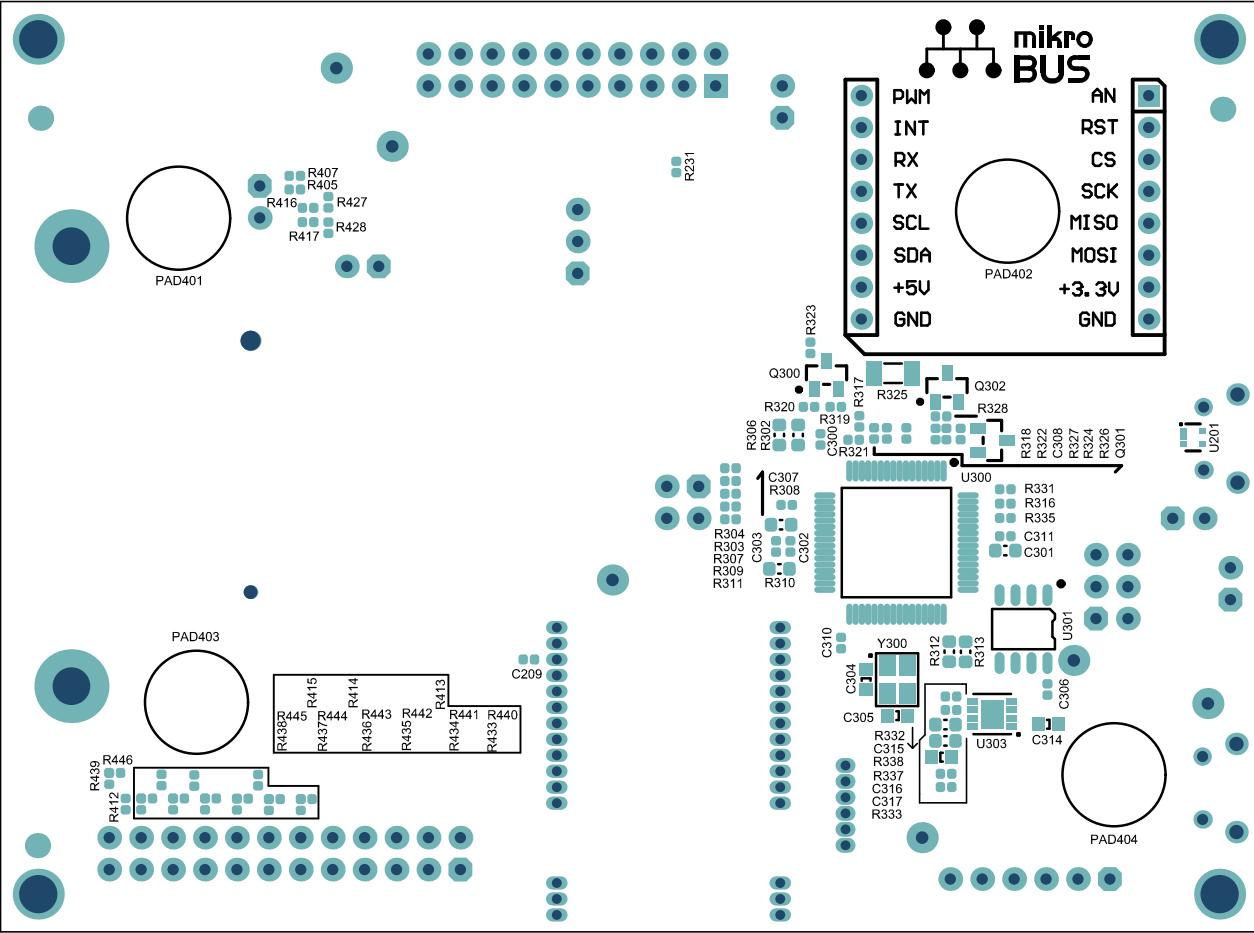
A

B

B

C

C



0.1

100% C0000000

1

2

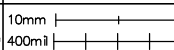
3

4

5

6

D

 MICROCHIP Microchip Technology Inc. 2355 W. Chandler Blvd. Chandler, AZ 85224	TITLE: PIC32 WF132E Curiosity Board			PART NUMBER: EV12F11A		
	PCB DESIGNER: Chandan Kumar MN		GERBER FILE: BOTTOM Silk			
	ENGINEER: Chandan Kumar MN		BOARD NUMBER: 11134		DOCUMENT NUMBER:	
					DATE: 8/21/2020	
	PCB FILE NAME: 04-11134-R4.0.PcbDoc		LAYER NAME: Bottom Overlay		REV: 4.0	
						

Bill of Materials

PIC32 WFI32E Curiosity Board

Document Number: 02-11134

PCB Number: 04-11134

Part Number: EV12F11A

Revision: 4.0

Engineer: Chandan Kumar MN

Drawn By: Chandan Kumar MN

M

Creation Date: 8/21/2020

Creation Time: 6:00 PM

Quantity	Designator	Description_	Manufacturer 1	Manufacturer Part Number 1	Supplier 1	Supplier Part Number 1	Supplier Unit Price 1	Price / 1 Board
15	C200, C205, C207, C209, C210, C300, C302, C307, C308, C309, C310, C311, C315, C317, C401	CAP CER 0.1uF 16V 10% X7R SMD 0402	Wurth Electronics Inc	885012205037	Digi-Key	732-7532-1-ND		\$0.0000
1	C201	CAP CER 100uF 16V 20% X5R SMD 1210	Yageo	CC1210MKX5R7BB107	Digi-Key	311-2052-2-ND		\$0.0000
4	C202, C303, C306, C312	CAP CER 1uF 16V 10% X5R SMD 0402	Murata	GRM155R61C105KE01D	Digi-Key	490-10453-2-ND		\$0.0000
1	C203	CAP CER 4.7uF 16V 20% Y5V SMD 0805	Panasonic	ECJ-2FF1C475Z	Digi-Key	PCC2232TR-ND		\$0.0000
3	C204, C318, C319	CAP CER 4.7uF 10V 10% X5R SMD 0603	KEMET	C0603C475K8PACTU	Digi-Key	399-5503-1-ND		\$0.0000
1	C211	CAP CER 0.1uF 10V 10% X7R SMD 0603	KEMET	C0603C104K8RACTU	Digi-Key	399-1095-1-ND		\$0.0000
1	C301	CAP CER 10uF 10V 20% X5R SMD 0603	Samsung	CL10A106MP8NNNC	Digi-Key	1276-1871-1-ND		\$0.0000
2	C304, C305	CAP CER 8pF 50V 0.5pF C0G SMD 0603	TDK	C1608C0G1H080D	Digi-Key	445-5043-2-ND		\$0.0000
1	C313	CAP CER 1uF 16V 10% X5R SMD 0603	AVX	0603YD105KAT2A	Digi-Key	478-1249-1-ND		\$0.0000
2	C314, C316	CAP CER 2.2uF 16V 10% X5R SMD 0603	TDK	C1608X5R1C225K	Digi-Key	445-5157-1-ND		\$0.0000
1	C402	CAP CER 22uF 16V 10% X5R SMD 0805	TDK	C2012X5R1C226K	Digi-Key	445-6797-2-ND		\$0.0000
4	D200, D201, D204, D301	DIO LED GREEN 2V 30mA 35mcd Clear SMD 0603	Lite-On Inc	LTST-C191KGKT	Digi-Key	160-1446-1-ND		\$0.0000
1	D202	DIO LED RED 2V 30mA 2mcd Clear SMD 0603	Lite-On	LTST-C190EKT	Digi-Key	160-1182-1-ND		\$0.0000
1	D203	DIO SCTKY MBR0520 385mV 500mA 20V SOD-123	Fairchild	MBR0520L	Digi-Key	MBR0520LCT-ND		\$0.0000
1	D300	DIODE SCHOTTKY 30V 1A PMDU	Rohm Semiconductor	RSX101MM-30TR	Digi-Key	RSX101MM-30CT-ND		\$0.0000
1	FB400	FERRITE 600R@100MHz 300mA SMD 0603	Murata	BLM18AG601SN1D	Digi-Key	490-1014-2-ND		\$0.0000
2	J200	SOCKET mikroBUS HOST DIP 16 TH	Sullins Connector Solution	PPTC081LFBN-RC	Digi-Key	S7006-ND		\$0.0000
5	J201, J205, J209, J210, J402	CON HDR-2.54 Male 1x2 Gold 5.84MH TH VERT	FCI	77311-118-02LF	Digi-Key	609-4434-ND		\$0.0000
1	J202	CON HDR-2.54 Male 2x3 Gold 5.84MH TH VERT	Samtec	TSW-103-07-S-D	Samtec	TSW-103-07-S-D		\$0.0000
1	J203	CON HDR-2.54 Male 2x10 Rotated 180Degrees Gold TH RT ANGLE	Sullins Connector Solution	PBC10DBAN	Digi-Key	S2111E-10-ND		\$0.0000

2	J204, J302	CON USB2.0 MICRO-B FEMALE TH/SMD R/A	FCI	10118194-0001LF	Digi-Key	609-4618-1-ND		\$0.0000
1	J206	CON HDR-2.54 Male 1x6 Gold 5.84MH TH R/A	FCI	68016-106HLF	Digi-Key	609-3313-ND		\$0.0000
1	J207	CON HDR-2.54 Male 2x12 Gold 5.84MH TH R/A	FCI	68021-224HLF	Digi-Key	609-3348-ND		\$0.0000
2	J208-2, J208-3	CON STRIP-1.27 Female 1x3 Gold TH VERT	Samtec	SLM-103-01-L-S	Samtec	SLM-103-01-L-S		\$0.0000
2	J208, J208-1	CON STRIP-1.27 Female 1x12 Gold TH VERT	Samtec	SLM-112-01-L-S	Samtec	SLM-112-01-L-S		\$0.0000
1	J211	CON HDR-2.54 Male 1x3 Gold 5.84MH TH VERT	FCI	68000-103HLF	Digi-Key	609-3461-ND		\$0.0000
1	J301	CON HDR-2.54 Male 2x2 Gold 5.84MH TH VERT	Samtec	TSW-102-07-G-D	Digi-Key	SAM1028-02-ND		\$0.0000
1	J401	CON EDGE MINI 0.5mm 67P Female SMD R/A	TE Connectivity AMP Cor	2199230-3	Digi-Key	A115903TR-ND		\$0.0000
1	Q200	TRANS FET P-CH IRLML6402 -20V -3.7A 1.3W SOT-23-3	International Rectifier	IRLML6402TRPBF	Digi-Key	IRLML6402PBFTR-ND		\$0.0000
1	Q300	TRANS BJT PNP MMBT3906 -40V -200mA 300mW SOT-23-3	NXP Semiconductors	PMBT3906,215	Digi-Key	568-1742-1-ND		\$0.0000
2	Q301, Q302	TRANS BJT NPN MMBT3904 40V 200mA 310mW SOT-23-3	Diodes Incorporated	MMBT3904-7	Digi-Key	MMBT3904DITR-ND		\$0.0000
10	R201, R203, R222, R237, R238, R301, R303, R307, R309, R336	RES TKF 330R 5% 1/10W SMD 0402	Panasonic Electronic Cor	ERJ-2GEJ331X	Digi-Key	P330JTR-ND		\$0.0000
13	R202, R220, R221, R223, R224, R300, R314, R318, R320, R324, R327, R331, R335	RES TKF 10k 1% 1/10W SMD 0402	Panasonic	ERJ-2RKF1002X	Digi-Key	P10.0KLCT-ND		\$0.0000
16	R204, R205, R206, R207, R208, R209, R211, R212, R213, R214, R215, R216, R217, R218, R219, R228	RES TKF 0R SMD 0402, RES TKF 0R SMD 0402 AEC-Q200	Panasonic	ERJ-2GE0R00X	Digi-Key, digike	P0.0JCT-ND		\$0.0000
1	R225	RES TKF 1k 1% 1/10W SMD 0402	Panasonic	ERJ-2RKF1001X	Digi-Key	P1.00KLTR-ND		\$0.0000
23	R226, R404, R405, R406, R407, R408, R409, R410, R411, R412, R413, R414, R415, R416, R417, R418, R419, R423, R424, R425, R426, R431, R432	RES TKF 22R 1% 1/20W SMD 0402	Panasonic Electronic Cor	ERJ-2RKF22R0X	Digi-Key	P22.0LCT-ND		\$0.0000
5	R236, R308, R310, R312, R313	RES TF 10k 1% 1/8W SMD 0603	Vishay Beyschlag	MCT06030C1002FP500	Digi-Key	MCT0603-10.0K-CFTR-ND		\$0.0000
1	R302	RES TKF 1k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1001V	Digi-Key	P1.00KHCT-ND		\$0.0000
2	R304, R311	RES TKF 4.7k 5% 1/10W SMD 0402	Panasonic	ERJ-2GEJ472X	Digi-Key	P4.7KJCT-ND		\$0.0000
1	R305	RES TKF 100R 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1000V	Digi-Key	P100HCT-ND		\$0.0000
1	R306	RES TKF 3.16k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF3161V	Digi-Key	P3.16KHTR-ND		\$0.0000
3	R315, R321, R322	RES TKF 2.2k 1% 1/10W SMD 0402	Panasonic	ERJ-2RKF2201X	Digi-Key	P2.20KLTR-ND		\$0.0000
2	R316, R332	RES TKF 200k 1% 1/10W SMD 0402	Panasonic	ERJ-2RKF2003X	Digi-Key	P200KLCT-ND		\$0.0000
1	R317	RES TKF 3.92K 1% 1/16W SMD 0402	Yageo	RC0402FR-073K92L	Digi-Key	311-3.92KLRCT-ND		\$0.0000
1	R319	RES TKF 100k 1% 1/10W SMD 0402	Panasonic	ERJ-2RKF1003X	Digi-Key	P100KLCT-ND		\$0.0000
9	R323, R334, R440, R441, R442, R443, R444, R445, R446	RES TKF 0R 1/16W SMD 0402	Yageo	RC0402JR-070RL	Digi-Key	311-0.0JRCT-ND		\$0.0000
1	R325	RES TKF 100R 1% 1/4W SMD 1206	Yageo	RC1206FR-07100RL	Digi-Key	311-100FRCT-ND		\$0.0000
2	R329, R338	RES TKF 20k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF2002V	Digi-Key	P20.0KHCT-ND		\$0.0000
1	R337	RES TKF 147k 1% 1/10W SMD 0603	Panasonic	ERJ-3EKF1473V	Digi-Key	P147KHTR-ND		\$0.0000
3	R420, R421, R422	RES TKF 33R 1% 1/10W SMD 0402	Panasonic Electronic Cor	ERJ-2RKF33R0X	Digi-Key	P33.0LCT-ND		\$0.0000
2	R427, R428	RES TKF 1.5K 1% 1/16W SMD 0402	Yageo	RC0402FR-071K5L	Digi-Key	311-1.50KLRCT-ND		\$0.0000

2	SW200, SW201	SWITCH TACT SPST 12V 50mA TL3301AF160QG SMD	E-Switch	TL3301AF160QG	Digi-Key	EG2526CT-ND		\$0.0000
3	TP200, TP201, TP300	MISC, TEST POINT MULTI PURPOSE MINI RED	Keystone	5000	Digi-Key	36-5000-ND		\$0.0000
3	TP202, TP301, TP302	MISC, TEST POINT MULTI PURPOSE MINI BLACK	Keystone	5001	Digi-Key	5001K-ND		\$0.0000
2	U201, U302	DIO TVS ARRAY TPD3E001DRLR 11V 90W SMD SOT-553	Texas Instruments	TPD3E001DRLR	Digi-Key	296-21885-1-ND		\$0.0000
1	Y300	CRYSTAL 12MHz 8pF SMD NX3225SA	NDK	NX3225SA-12MHZ-STD-	Digi-Key	644-1180-1-ND		\$0.0000

Microchip Parts listed below

3	U200, U202, U304	MCHP ANALOG POWER SWITCH 5.5V 500mA MIC2005A-1YM5-TR SOT-23-5	Microchip Technology	MIC2005A-1YM5-TR	Digi-Key	576-3462-1-ND		\$0.0000
1	U203	MCHP MEMORY SERIAL FLASH SST26VF032B-104I/SM SOIJ-8	Microchip Technology	SST26VF032B-104I/SM	Microchip Tech	SST26VF032B-104I/SM		\$0.0000
1	U204	MCHP ANALOG TEMPERATURE SENSOR -40C to +125C TC1047AVNBTR SOT-23-3	Microchip Technology	TC1047AVNBTR	Microchip	TC1047AVNBTR		\$0.0000
1	U300	MCHP MCU 16-BIT 32MHz 256kB 16kB PIC24FJ256GB106-I/PT TQFP-64	Microchip	PIC24FJ256GB106T-I/PT	Microchip Tech	PIC24FJ256GB106T-I/PT		\$0.0000
1	U301	MCHP MEMORY SERIAL EEPROM 256k SPI 25LC256-E/SN SOIC-8	Microchip	25LC256T-E/SN	Microchip	25LC256T-E/SN		\$0.0000
1	U303	MCHP ANALOG LDO 0.8V-5V MCP1727T- ADJE/MF DFN-8	Microchip	MCP1727T-ADJE/MF	Microchip	MCP1727T-ADJE/MF		\$0.0000
								\$0.0000
								\$0.0000
								\$0.0000
								\$0.0000

Mechanical Parts to be added in the package

1	CBL2	MECH HW CABLE USB Male-A to Male Micro-B Clear 4'	DongGuan ZhanXin	A006ZX027	DongGuan Zha	A006ZX027		\$0.0000
7	JP200, JP201, JP202, JP203, JP204, JP300, JP301	MECH HW JUMPER 2.54mm 1x2 GOLD	Wurth Electronics Inc.	60900213421	Digi-Key	732-2678-ND		\$0.0000
1	LABEL100	LABEL, NEED HELP WITH ASSY/SERIAL			Dev Tools			\$0.0000
4	NUT1, NUT2, NUT3, NUT4	MECH HW NUT M3x2.4mm HEX Zinc	BOSSARD	1874659	TME	B3/BN117		\$0.0000
4	PAD401, PAD402, PAD403, PAD404	MECH HW RUBBER PAD CYLINDRICAL D7.9 H5.3 BLACK	3M	SJ61A11	Digi-Key	SJ5747-0-ND		\$0.0000
2	SCR1, SCR2	MECH HW SCREW M3x8mm CheeseHead Phillips Zinc	BOSSARD	1154257	TME	B3X8/BN384		\$0.0000
								\$0.0000

PCB

1	PCB1	Printed Circuit Board		04-11134-R4.0				\$0.0000
								\$0.0000

Do Not Populate Parts listed below

1	C208	CAP CER 0.1uF 16V 10% X7R SMD 0402	Wurth Electronics Inc	885012205037	Digi-Key	732-7532-1-ND		\$0.0000
1	J300	CON HDR-1.27 Female 1x6 Gold TH VERT	Samtec	SLM-106-01-G-S	Samtec	SLM-106-01-G-S		\$0.0000
5	R200, R326, R328, R330, R333	RES TKF 0R 1/16W SMD 0402	Yageo	RC0402JR-070RL	Digi-Key	311-0.0JRCT-ND		\$0.0000
3	R227, R229, R231	RES TKF 0R SMD 0402	Panasonic	ERJ-2GE0R00X	Digi-Key	P0.0JCT-ND		\$0.0000

1	R230	RES TKF 33R 1% 1/10W SMD 0402	Panasonic Electronic Cor	ERJ-2RKF33R0X	Digi-Key	P33.0LCT-ND		\$0.0000
4	R232, R233, R234, R235	RES TF 10k 1% 1/8W SMD 0603	Vishay Beyschlag	MCT06030C1002FP500	Digi-Key	MCT0603-10.0K-CFTR-ND		\$0.0000
4	R400, R401, R402, R403	RES TKF 10k 5% 1/10W SMD 0402	Panasonic	ERJ-2GEJ103X	Digi-Key	P10KJCT-ND		\$0.0000
7	R433, R434, R435, R436, R437, R438, R439	RES TKF 22R 1% 1/20W SMD 0402	Panasonic Electronic Cor	ERJ-2RKF22R0X	Digi-Key	P22.0LCT-ND		\$0.0000
1	X200	OSC MEMS 50.000 MHz_1.8V~3.3V SMD	Abracon Corporation	ASEMB-50.000MHZ-LC-T	Digi-Key	535-11758-1-ND		\$0.0000
								\$0.0000

Approved	Notes	Description