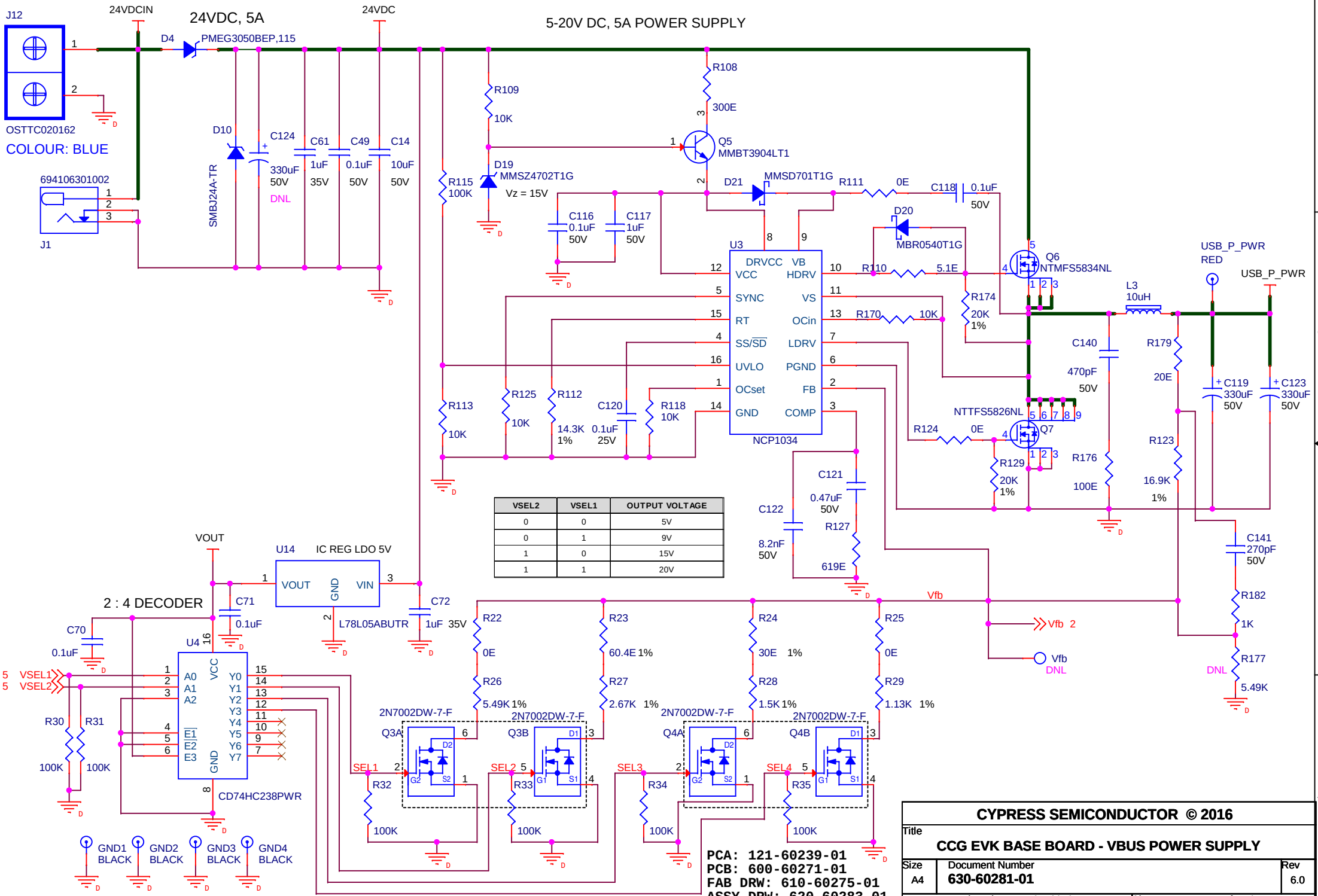


VSEL2	VSEL1	OUTPUT VOLTAGE
0	0	5V
0	1	9V
1	0	15V
1	1	20V

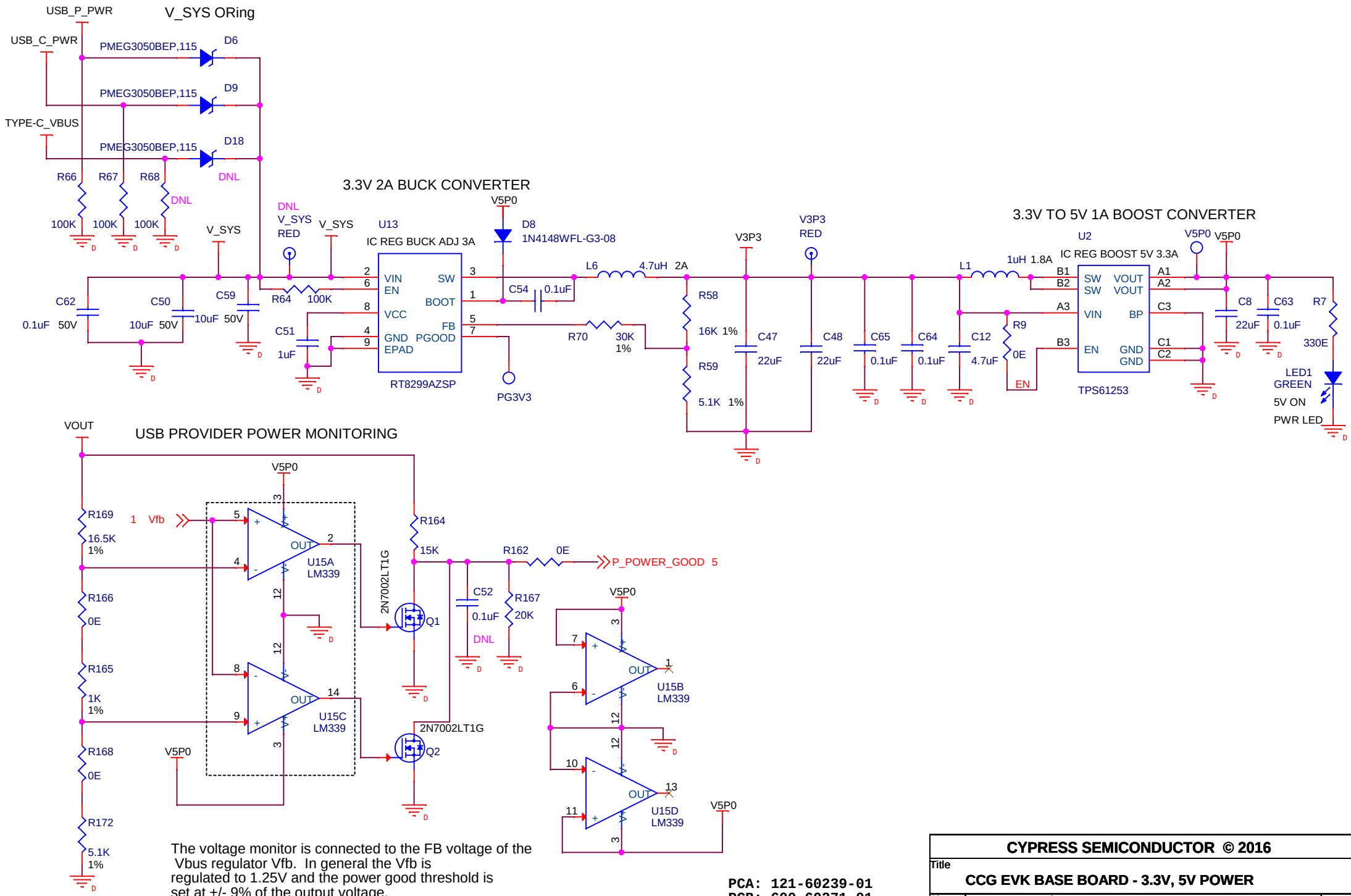
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FAB DRW: 610-60275-01
ASSY DRW: 620-60283-01

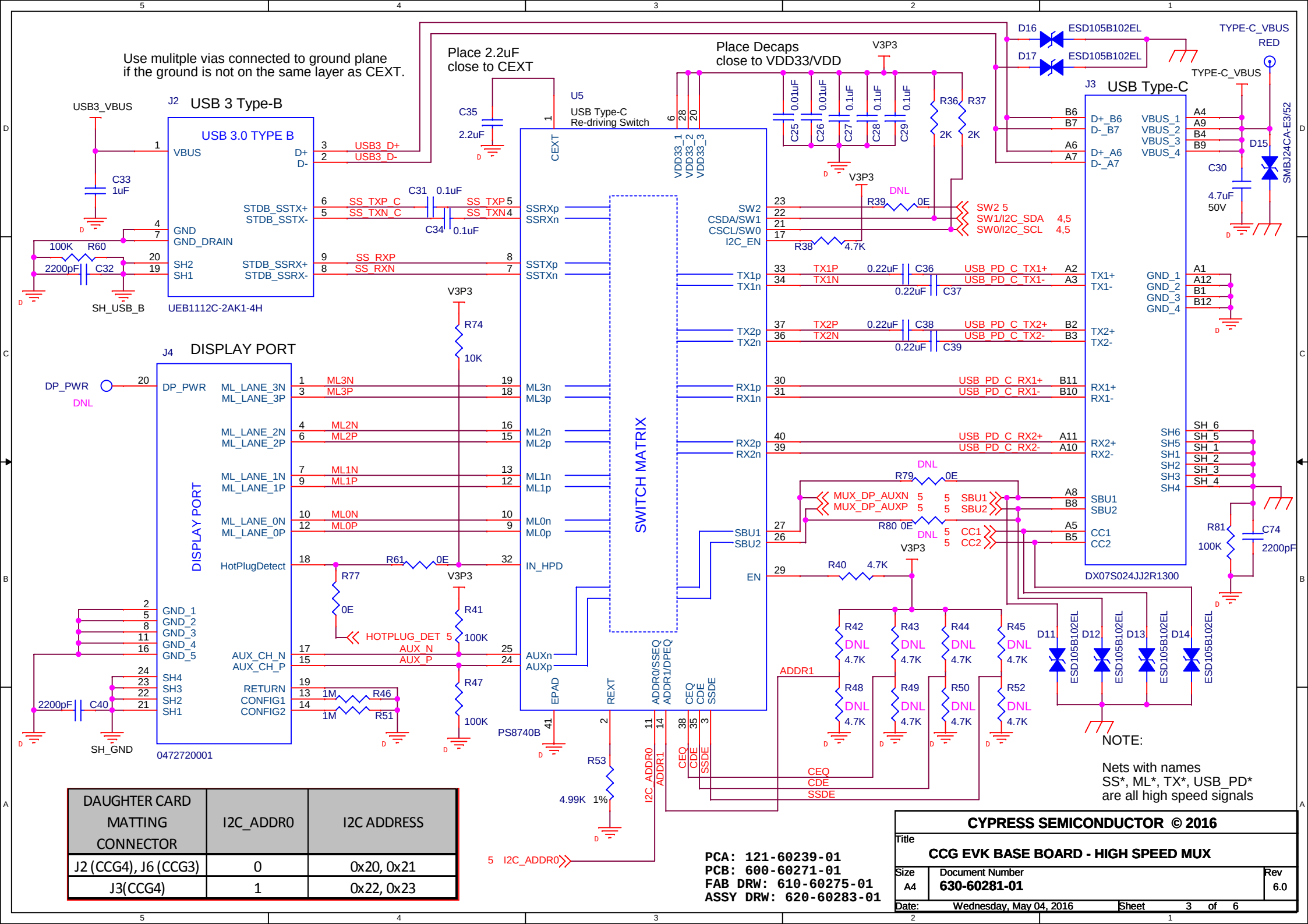
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Title: CCG EVK BASE BOARD - VBUS POWER SUPPLY

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V_SYS ORing
USB_P_PWR
USB_C_PWR
TYPE-C_VBUS
PMEG3050BEP,115
D6
D9
D18
DNL
R66
R67
R68
100K
V_SYS
3.3V 2A BUCK CONVERTER
U13
IC REG BUCK ADJ 3A
VIN
EN
VCC
SW
BOOT
FB
GND
PGOOD
EPAD
RT8299AZSP
V5P0
D8
1N4148WFL-G3-08
V_SYS RED
R64
C62
C50
C59
C51
C54
0.1uF
10uF
50V
1uF
L6
4.7uH
2A
R70
30K
1%
PG3V3
V3P3
V3P3 RED
R58
16K
R59
5.1K
C47
C48
22uF
C65
C64
C12
4.7uF
3.3V TO 5V 1A BOOST CONVERTER
U2
IC REG BOOST 5V 3.3A
L1
1uH 1.8A
SW
VOUT
BP
EN
GND
TPS61253
R9
0E
C3
C1
C2
C8
C63
R7
330E
LED1
GREEN
5V ON
PWR LED
USB PROVIDER POWER MONITORING
VOUT
R169
16.5K
1%
Vfb
R166
R165
1K
R168
R172
5.1K
U15A
LM339
U15C
U15B
U15D
R164
15K
R162
P_POWER_GOOD
C52
R167
20K
2N7002LT1G
Q1
Q2
The voltage monitor is connected to the FB voltage of the Vbus regulator Vfb. In general the Vfb is regulated to 1.25V and the power good threshold is set at +/- 9% of the output voltage.
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PCB: 600-60271-01
FAB DRW: 610-60275-01
ASSY DRW: 620-60283-01
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Title
CCG EVK BASE BOARD - 3.3V, 5V POWER
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DAUGHTER CARD MATTING CONNECTOR	I2C_ADDR0	I2C ADDRESS
J2 (CCG4), J6 (CCG3)	0	0x20, 0x21
J3(CCG4)	1	0x22, 0x23

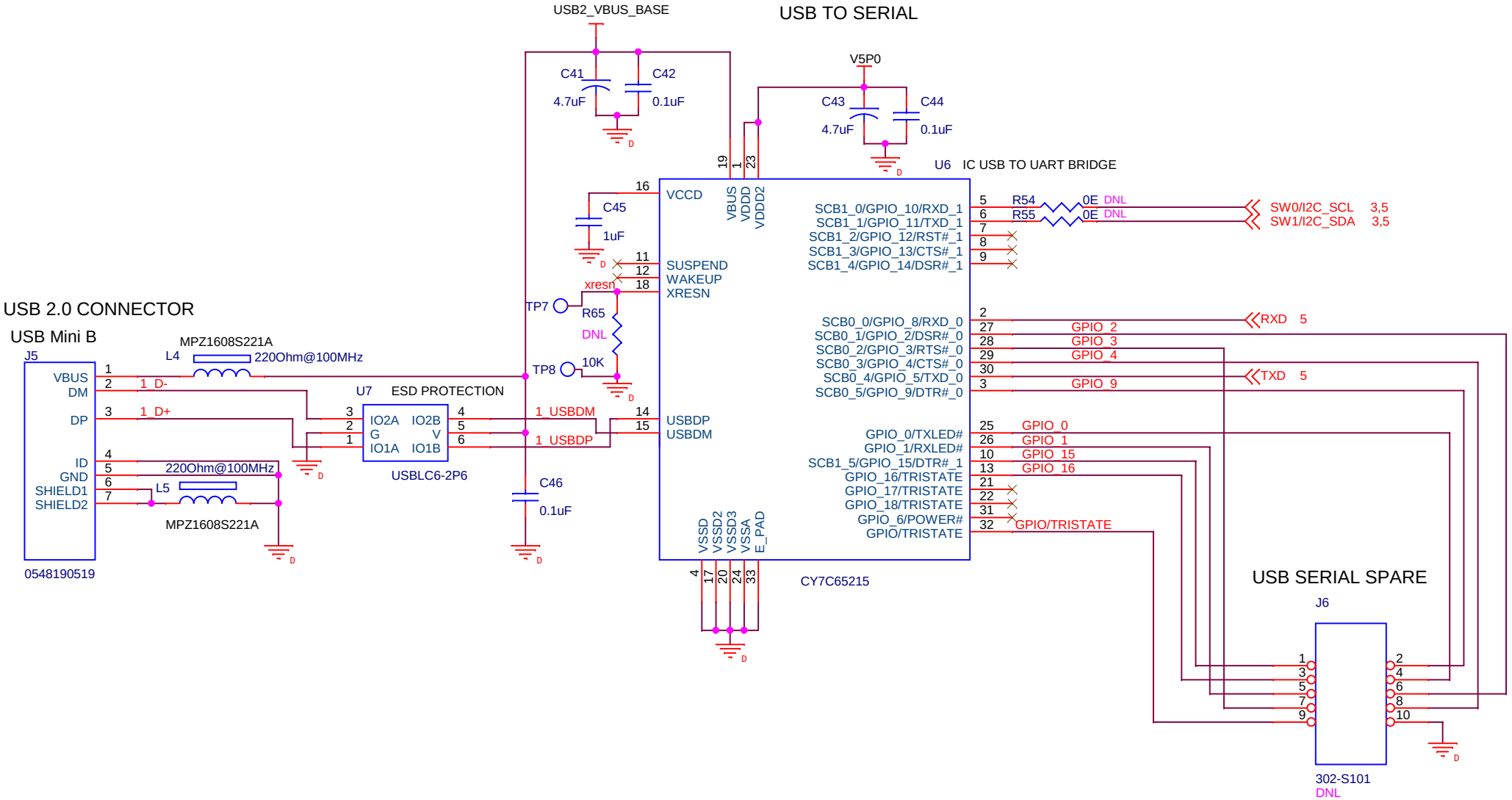
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Title: **CCG EVK BASE BOARD - HIGH SPEED MUX**

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Title	CCG EVK BASE BOARD - USB TO SERIAL	
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CONSUMER POWER OUTPUT
5 - 20V DC

USB_C_PWR
RED

J7

1935161

COLOUR: GREEN

CCG DAUGHTER CARD INTERFACE CONNECTOR

J8

SFH11-PBPC-D20-ST-BK

3,4,5	SW0/I2C_SCL		
3,4,5	SW1/I2C_SDA		
	5 OCP		
	2 P_POWER_GOOD		
	1,5 VSEL2		
	3,5 CC1		
	4 RXD		
	4 TXD		
	3 MUX_DP_AUXN		
	3 MUX_DP_AUXP		
	3 SBU2		
	3 SBU1		
	5 I2C_SCL_EC		
	1,5 VSEL1		
		VBUS_DISCHRG	5
		CCG_SWD_IO	5
		CCG_SWD_CLK	5
		CCG_XRES	5
		I2C_ADDR0	3
		VCONN_MON	
		CC2	3,5
		VBUS_P_CTRL	1,5
		VBUS_MON_GPIO	5 5
		I2C_INT_EC	5
		VBUS_C_CTRL	5
		OVP_TRIP	5
		I2C_SDA_EC	5
		HOTPLUG_DET	3,5
		USB2_DP/SW1_P2	
		USB2_DM/SW0_P2	

VCONN_MON — VCONN_MON DNL
TP12 DNL
TP11 DNL

V5P0
V3P3

USB_C_PWR
USB_P_PWR
TYPE-C_VBUS

R73
0E
R56
1K
R57
1K
SW1
EVQ-PE105K
LED2
ORANGE

J11
961102-6404-AR

DEFAULT:
JUMPER CLOSED

USER BUTTON / LED

DEBUG CONNECTOR

J9

SBH11-PBPC-D12-ST-BK

5	CCG_SWD_IO		
3,5	CC1		
5	I2C_SCL_EC		
5	I2C_INT_EC		
3,4,5	SW0/I2C_SCL		
3	SW2		
5	CCG_SWD_CLK		
1,5	VSEL1		
1,5	VBUS_P_CTRL		
	VBUS_MON_GPIO		
		CCG_XRES	5
		CC2	3,5
		I2C_SDA_EC	5
		HOTPLUG_DET	3,5
		SW1/I2C_SDA	3,4,5
		OCP	5
		OVP_TRIP	5
		VSEL2	1,5
		VBUS_DISCHRG	5
		VBUS_C_CTRL	5

TYPE-C_VBUS
V3P3
V3P3
R75
DNL
2K
R76
DNL
2K

I2C CONNECTOR

J10

M20-9990445

DNL

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Title	**CCG EVK BASE BOARD - CCG**	
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Revision	Description of the change
2.0	1. R75 AND R76 MARKED AS DNL 2. R19 CHANGED FROM 1K TO 0E 3. R17 CHANGED FROM 1K TO 10K AND C19 FROM 0.022UF TO 0.001UF 4. J1 PART NUMBER CHANGED. 5. V3P3 TEST POINT ADDED 6. FUSE (F1) REMOVED 7. CHANGED D4 PART NUMBER AS PMEG3050BEP,115 8. ORING IC U12 AND ITS CIRCUITS REMOVED AND DIODE D6, D9 ADDED INSTEAD. 9. R74 VALUE CHANGED FROM 100K TO 10K 10. R61 DNL REMOVED 11. 22V 250mA BOOST CONVERTER (U9) CIRCUITS REMOVED
3.0	1. U14 INPUT VOLTAGE (16TH PIN) CHANGED FROM 24VDCIN TO 24VDC (AFTER DIODE D4) 2. R13 VALUE CHANGED FROM 0E TO 100K 3. C68 1uF ADDED FOR U3.21 PIN 4. C69 1uF ADDED FOR U3.14 PIN 5. R8 0603 0E RESISTOR ADDED INBETWEEN 24VDC AND VCC POWER OF U3 6. D7 ZENER DIODE (3SMBJ5935B-TP) ADDED IN THE VCC POWER LINE OF U3 AND MARKED AS DNL. 7. J7 CONNECTOR PITCH CHANGED FROM 2.54MM TO 5MM 8. C61 MOVED AFTER D4 DIODE AND ZENER DIODE(D10) "SMBJ24A-TR" ADDED AFTER D4 AND C60 REMOVED. 9. C67 COMPONENT VALUE CHANED FROM 0.1uF TO 1uF 10.ESD DIODE ADDED TO SBU1, SBU2, CC1 AND CC2 NETS IN J3. 11.SH1, SH2, SH3, SH4,SH5, SH6 CONNECTED THROUGH R, C TO GROUND 12.ESD DIODE ADDED TO D+, D- NETS IN J3. 13.ESD DIODE ADDED TYPE-C_VBUS NETS IN J3.
4.0	1. C75 ADDED. 2. MINOR TEXT CHANGES DONE. 3. I2C ADDRESS SELECTION TABLE ALSO UPDATED.
5.0	1. R66 1M 0603 PAD RESISTOR ADDED INBETWEEN SOURCE AND GATE OF Q2. 2. C75 10uF CHANGED FROM 0402 TO 0603 PACKAGE. 3. R22 VALUE CHANGED FROM 0E TO 330E.
6.0	1. 5-20V POWER STAGE REGULATOR CIRCUITS CHANGED IN PAGE1 AND USB PROVIDER POWER MONITORING CIRCUITS WERE ADDED. 2. D18,R66,R67,R68 WERE ADDED. 3. C30 VALUE CHANGED FROM 10uF TO 4.7uF. 4. R22-R29 VALUES WERE CHANGED. 5. ACROSS R65 TWO TEST POINTS ADDED.

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Title: **CCG EVK BASE BOARD - REV HISTORY**

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