BASEBAND PD/PORT MCU

PPVAR_SYS   3   DP_HPD   3

Q5
ALPHA & OMEGA
AO3414
20V
62MOHM
3A
SOT23_3P_1

R2
1M
5%
0402

3 2 PP3300
Q1
ALPHA & OMEGA
AO3418
30V
55MOHM
3.8A
SOT23_3P_1

NOTE: THIS ADAPTER ONLY SUPPORTS 5V VBUS

3 2 PP3300

C1 4.7UF 0402 10V X5R
C2 0.1UF 0402 16V X5R
C5 0.1UF 0402 16V X5R

U6   I88
1   VBAT   PA0   10 DP_HPD_BUF
24 VDD   PA1   11 USB_C_CC1_PD
48 VDD   PA2   12
9   VDDA   PA3   13
                 PA4   14 PD_DAC_REF
FB1 0402 600@100MHZ   PA5   15 DP_AUX_N   3 2   TP9
PP3300_PD_VDDA   PA6   16 DP_AUX_P   3 2
C4 0.1UF 0402 10V X5R PA7   17
C7 0.01UF 0402 16V X7R

R4 0.0 0402

R6 5.1K 5% 0402

3 USB_C_VBUS
C23 0.1UF 0402 16V X5R

36 VDDIO2   PA8   29 PD_SBU_ENABLE
C3 4.7UF 0402 10V X5R PA9   30 PD_UART_TX   TP4
C6 0.1UF 0402 16V X5R PA10 31 PD_UART_RX   TP5
                 PA11 32 USB_DM 2
                 PA12 33 USB_DP 2
                 PA13 34 PD_SWDIO   TP6
                 PA14 37 PD_SWCLK   TP7
                 PA15 38 PD_CC1_TX_EN   2

R10 100K 5% 0402
R8 300 5% 0402
I242

Q2
D1_1
PMDXB600UNE
NXP SEMICONDUCTOR
SOT1216
480-00226-00

2 PD_CC1_TX_DATA
R19 0.0 0402
C19 100K 0402
G1 S1

R9 150 5% 0402
C20 220PF 0402 50V NP0

Q2
D2_1
NXP SEMICONDUCTOR
PMDXB600UNE
SOT1216
480-00226-00
I243

PPVAR_VCONN

U12   I265
1 IO1   IO2 6
2 GND   VCC 5
3 IO3   IO4 4
ON SEMICONDUCTOR
NUP4114UPXV6T1G
SOT563
430-00003-00

TYPE-C USB PLUG

PIN NUMBER ON CABLE PLUG:

J1
VBUS VBUS   A4,A9,B4,B9
000-37598-00

TP1 PD_OSC_IN   5 PF0/OSC_IN   PB0 18
PB1 19
PB2 20 PD_TX_CLK
PB3 39 PD_TX_CLK
PB4 40 PD_CC1_TX_DATA 2
TP2 PD_OSC_OUT 6 PF1/OSC_OUT PB5 41
PB6 42
PB7 43
PB8 45
PB9 46

TP8
R1 100K 0402
PD_BOOT0 44 BOOT0 PB10 21
PB11 22
TP3 PD_NRST_L 7 NRST PB12 25
C8 0.1UF 0402 16V X5R PB13 26
PB14 27
PB15 28

PC13 2
PC14/OSC32_IN 3

23 VSS
35 VSS
47 VSS
8   VSSA
49 PAD

PC15/OSC32_OUT 4

ST MICROELECTRONICS
STM32F072CBU6TR
QFN48
313-00875-00

2 PD_CC1_TX_EN 5
G2 S2

FAIRCHILD SEMICONDUCTOR
MMBF5459
SOT23_3P_1
480-00418-00

NOTE: THE U2 JFET REDUCES THE CURRENT DRAWN
BY R7 WHEN USING VCONN TO PROVIDE POWER

D U2
G JFET
S

R7 1K 5% 0402

USB_C_CC1   CC1 CC1 A5
VCONN VCONN B5
USB_C_SBU1 SBU1 SBU1 B8
USB_C_SBU2 SBU2 SBU2 A8

2 USB_DM DN1 DM1 A7
2 USB_DP DP1 DP1 A6

3 USB_C_DP_ML2_N SSRXN1 SSRX1_N A3
3 USB_C_DP_ML2_P SSRXP1 SSRX1_P A2
3 USB_C_DP_ML3_N C10 USB_C_DP_ML3_C_N SSTXN1 SSTX1_N B10
3 USB_C_DP_ML3_P C11 USB_C_DP_ML3_C_P SSTXP1 SSTX1_P B11
0.1UF 16V 0402 X5R

3 USB_C_DP_ML1_N SSRXN2 SSRX2_N B3
3 USB_C_DP_ML1_P SSRXP2 SSRX2_P B2
0.1UF 16V 0402 X5R
3 USB_C_DP_ML0_N C12 USB_C_DP_ML0_C_N SSTXN2 SSTX2_N A10
3 USB_C_DP_ML0_P C13 USB_C_DP_ML0_C_P SSTXP2 SSTX2_P A11
0.1UF 16V 0402 X5R

3 2 PP3300
C9 0.1UF 0402 16V X5R

VCC U1 I250
2 3 DP_AUX_N 1 1Y 1Z 2
7 1E
2 3 DP_AUX_P 5 2Y 2Z 6
3 2E
GND
NXP SEMICONDUCTOR
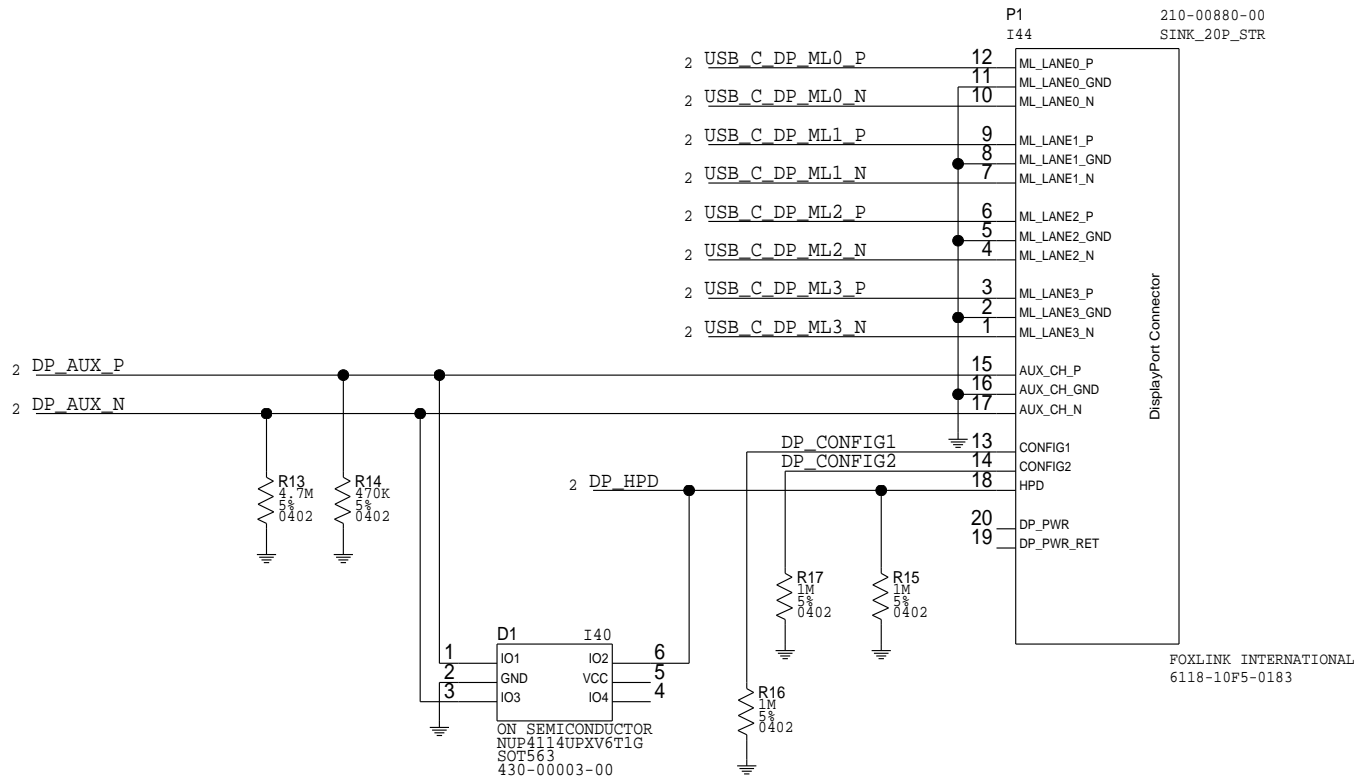NX3L2T66GT
XSQN8
313-00899-00

R5 100K 5% 0402

GND GND A1,A12,B1,B12

SHIELD SHIELD

I280
FOXLINK
NA
FF_CBL2BRD

DISPLAYPORT CONNECTOR

P1
I44
210-00880-00
SINK_20P_STR

Pin	Signal	Net
12	ML_LANE0_P	2 USB_C_DP_ML0_P
11	ML_LANE0_GND	
10	ML_LANE0_N	2 USB_C_DP_ML0_N
9	ML_LANE1_P	2 USB_C_DP_ML1_P
8	ML_LANE1_GND	
7	ML_LANE1_N	2 USB_C_DP_ML1_N
6	ML_LANE2_P	2 USB_C_DP_ML2_P
5	ML_LANE2_GND	
4	ML_LANE2_N	2 USB_C_DP_ML2_N
3	ML_LANE3_P	2 USB_C_DP_ML3_P
2	ML_LANE3_GND	
1	ML_LANE3_N	2 USB_C_DP_ML3_N
15	AUX_CH_P	2 DP_AUX_P
16	AUX_CH_GND	2 DP_AUX_N
17	AUX_CH_N	
13	CONFIG1	DP_CONFIG1
14	CONFIG2	DP_CONFIG2
18	HPD	2 DP_HPD
20	DP_PWR	
19	DP_PWR_RET	

DisplayPort Connector

FOXLINK INTERNATIONAL
6118-10F5-0183

R13
4.7M
5%
0402

R14
470K
5%
0402

R17
1M
5%
0402

R15
1M
5%
0402

R16
1M
5%
0402

D1   I40
1 IO1   IO2 6
2 GND   VCC 5
3 IO3   IO4 4

ON SEMICONDUCTOR
NUP4114UPXV6T1G
SOT563
430-00003-00

3.3V

2 PPVAR_VCONN

Q3
ALPHA & OMEGA
AO3415
-20V   11NC
43MOHM
-4A
SOT23_3P_1

R3
100K
5%
0402

2 PPVAR_SYS

D2
NXP SEMICONDUCTOR
PMEG4030ER,115
3A

I33
U4
313-00587-00
4 IN   OUT 1
3.3V
3 EN   GND 2
PAD

C15
0.1UF
0402
16V
X5R

C16
1.0UF
0402
10V
X5R

PP3300 2

TEXAS INSTRUMENTS INC
TLV70733PDQNR
200MA LOW IQ LDO
DFN4

MAX DRAW 27MA

2 USB_C_VBUS