rs close to PHY (with the exception of ethernet coupling caps)

33n 100 ohm differential GBE_MDI0_N1.5B

33n 100 ohm differential GBE_MDI0_P1.5C

33n 100 ohm differential GBE_MDI1_N1.5C

33n 100 ohm differential GBE_MDI1_P1.5C

3V3_PHY4

PHY ADDRESS: 0b01111

R67 1.5k
R56 2.2k
R57 2.2k
R58 2.2k
R59 2.2k
R60 2.2k
R19 2.2k

Note: Route to MCU GPIOs

PWR_DWN_P4
RST_P4/8.7D

SWCH_P4_TX0/16.5E 50 ohm netclass
SWCH_P4_TX1/16.5E 50 ohm netclass

SWCH_P4_TXEN/16.5D 50 ohm netclass

GMDIO/8.7D
GMDC/8.7D

SWCH_P4_CRSDV/16.2E 50 ohm netclass

R78 33
Note: Place in line resistors close to device.

SWCH_P4_RX0/16.2E 50 ohm netclass
SWCH_P4_RX1/16.2E 50 ohm netclass

R82 33
R83 33

R61 2.2k
R62 2.2k

GND

PHY 4

U17 DP83848MPHPEP

7	PWR_DOWN_INT	12	TDI
29	RESET_N	9	TDO
		8	TCK
1	TX_CLK	10	TMS
		11	TRST_N
3	TXD_0	17	TD_PLUS
4	TXD_1	16	TD_MINUS
5	TXD_2		
6	TXD_3_SNI_MODE	14	RD_PLUS
		13	RD_MINUS
2	TX_EN		
		34	X1
30	MDIO	33	X2
31	MDC		
42	COL_PHYAD0	25	25MHZ_OUT
40	CRS_CRS_DV_LED_CFG	26	LED_ACT_COL_AN_EN
41	RX_ER_MDIX_EN	27	LED_SPEED_AN1
39	RX_DV_MII_MODE	28	LED_LINK_AN0
		24	RBIAS
43	RXD_0_PHYAD1	23	PFBOUT
44	RXD_1_PHYAD2		
45	RXD_2_PHYAD3	18	PFBIN1
46	RXD_3_PHYAD4	37	PFBIN2
		21	RESERVED
38	RX_CLK	20	RESERVED_2
		49	GNDPAD
32	IOVDD33_2	35	IOGND_2
48	IOVDD33	47	IOGND
22	AVDD33	15	AGND_2
		19	AGND
		36	DGND

R63 2.2k
R64 2.2k

JTAG for debug. May not need.

R149 2.2k Activity
R148 110
D10 Green
R147 2.2k Power
R146 110
D9 Amber
R145 2.2k Link
R144 110
D11 Green

TDI_P4
TDO_P4
TCK_P4
TMS_P4
TRST_N_P4

100 ohm differential EXT1_TD_P
100 ohm differential EXT1_TD_N
100 ohm differential EXT1_RD_P
100 ohm differential EXT1_RD_N
50 ohm netclass SWCH_P4_REFCLK/16.5D

Note: Place capacitors C7, C8, C9, C10 close to device.

C47 0.1u
C48 0.1u
C65 10u
C49 0.1u
R104 4.87k

GND

Note: Place resistors and capacitors close to PHY.

EXT1_TD_P
EXT1_TD_N
EXT1_RD_P
EXT1_RD_N

R96 49.9
R97 49.9
C53 0.1u
GND

R100 49.9
R101 49.9
C50 0.1u
GND

T1
S558-5999-U7-F

1	16 100 ohm differential EXT1_TX_P/9.??
2	15
3	14 100 ohm differential EXT1_TX_N/9.??
6	11 100 ohm differential EXT1_RX_P/9.??
7	10
8	9 100 ohm differential EXT1_RX_N/9.??

C51 0.1u
C52 0.1u
GND GND

Note: Place capacitors close to the respective center taps (pin 7 and pin 2 respectively).

rs close to PHY (with the exception of ethernet coupling caps)

33n 100 ohm differential TX_B2_N/9.??

33n 100 ohm differential TX_B2_P/9.??

33n 100 ohm differential RX_B2_N/9.??

33n 100 ohm differential RX_B2_P/9.??

3V3_PHY3/16.7D

PHY ADDRESS: 0b01111

R66 1.5k
R74 2.2k
R39 2.2k
R34 2.2k
R40 2.2k
R19 2.2k

Note: Route to MCU GPIOs

PWR_DWN_P3
RST_P3/8.7D

SWCH_P3_TX0/16.5D 50 ohm netclass
SWCH_P3_TX1/16.5D 50 ohm netclass

SWCH_P3_TXEN/16.5D 50 ohm netclass

GMDIO/8.7D
GMDC/8.7D

SWCH_P3_CRSDV/16.2D 50 ohm netclass

R75 33
Note: Place in line resistors close to device.

SWCH_P3_RX0/16.2D 50 ohm netclass
SWCH_P3_RX1/16.2D 50 ohm netclass

R76 33
R77 33

R43 2.2k
R53 2.2k

PHY 3

U19 DP83848MPHPEP

7	PWR_DOWN_INT	12	TDI
29	RESET_N	9	TDO
		8	TCK
1	TX_CLK	10	TMS
		11	TRST_N
3	TXD_0	17	TD_PLUS
4	TXD_1	16	TD_MINUS
5	TXD_2		
6	TXD_3_SNI_MODE	14	RD_PLUS
		13	RD_MINUS
2	TX_EN		
		34	X1
30	MDIO	33	X2
31	MDC		
42	COL_PHYAD0	25	25MHZ_OUT
40	CRS_CRS_DV_LED_CFG	26	LED_ACT_COL_AN_EN
41	RX_ER_MDIX_EN	27	LED_SPEED_AN1
39	RX_DV_MII_MODE	28	LED_LINK_AN0
		24	RBIAS
43	RXD_0_PHYAD1	23	PFBOUT
44	RXD_1_PHYAD2		
45	RXD_2_PHYAD3	18	PFBIN1
46	RXD_3_PHYAD4	37	PFBIN2
		21	RESERVED
38	RX_CLK	20	RESERVED_2
		49	GNDPAD
32	IOVDD33_2	35	IOGND_2
48	IOVDD33	47	IOGND
22	AVDD33	15	AGND_2
		19	AGND
		36	DGND

R54 2.2k
R55 2.2k

JTAG for debug. May not need.

R149 2.2k Activity
R148 110
D10 Green
R147 2.2k Power
R146 110
D9 Amber
R145 2.2k Link
R144 110
D11 Green

TDI_P3
TDO_P3
TCK_P3
TMS_P3
TRST_N_P3

100 ohm differential EXT2_TD_P
100 ohm differential EXT2_TD_N
100 ohm differential EXT2_RD_P
100 ohm differential EXT2_RD_N
50 ohm netclass SWCH_P3_REFCLK/16.5D

Note: Place capacitors C41, C42, C43, C44 close to device.

C39 0.1u
C62 0.1u
C61 10u
C43 0.1u
R103 4.87k

GND

Note: Place resistors and capacitors close to PHY.

EXT2_TD_P
EXT2_TD_N
EXT2_RD_P
EXT2_RD_N

R92 49.9
R93 49.9
C46 0.1u
GND

R94 49.9
R95 49.9
C40 0.1u
GND

T3
S558-5999-U7-F

1	16 100 ohm differential EXT2_TX_P/9.??
2	15
3	14 100 ohm differential EXT2_TX_N/9.??
6	11 100 ohm differential EXT2_RX_P/9.??
7	10
8	9 100 ohm differential EXT2_RX_N/9.??

C41 0.1u
C42 0.1u
GND GND

Note: Place capacitors close to the respective center taps (pin 7 and pin 2 respectively).