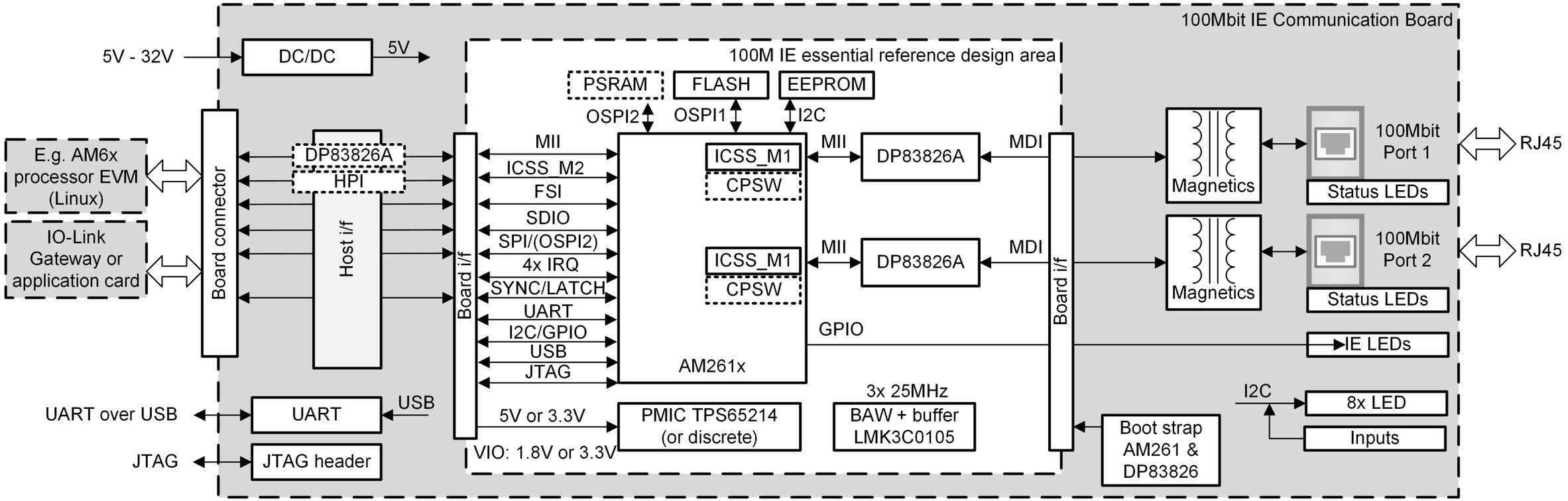

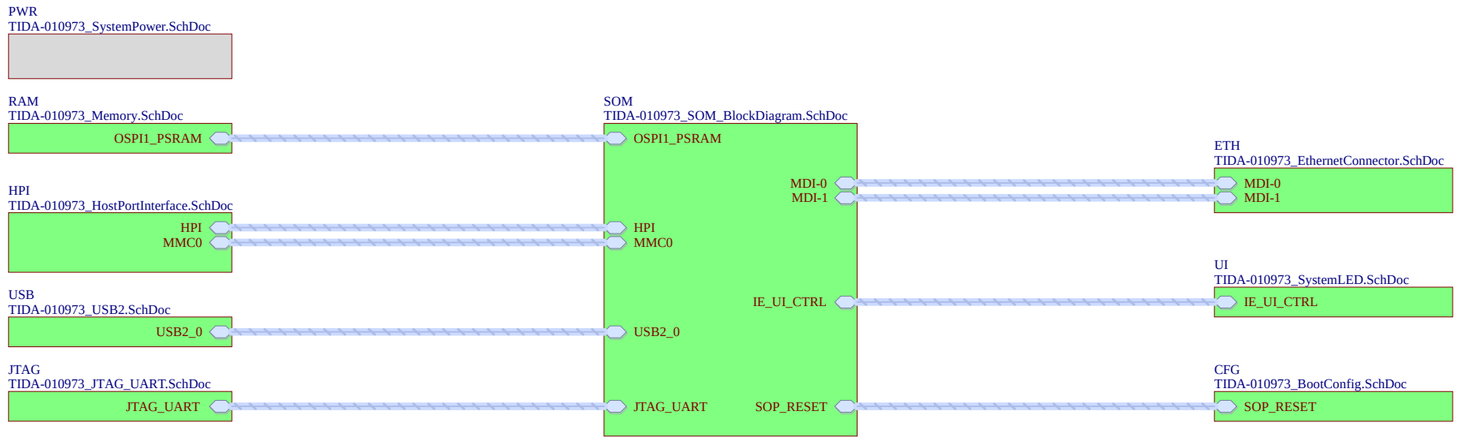

HW
TIDA-010973_Hardware.SchDoc

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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 2/13/2026
TID #: TIDA-010973	Project Title: 100Mbit IE Comm Module	
Number: TIDA-010973 Rev: E2	Sheet Title:	
SVN Rev: 16154 [Locally Modified]	Assembly Variant: 001	Sheet: 1 of 15
Drawn By:	File: TIDA-010973_BaseBoard.SchDoc	Size: B
Engineer: Thomas Mauer	Contact: http://www.ti.com/support	

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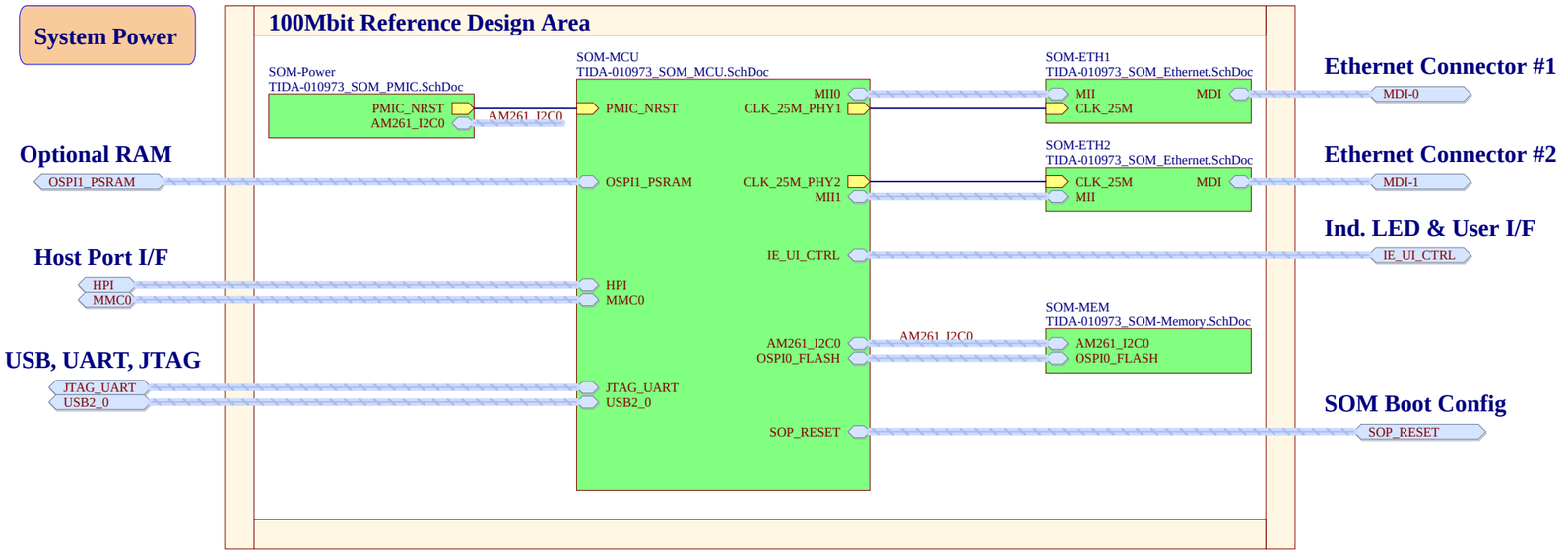

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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 6/12/2025
TID #: TIDA-010973	Project Title: 100Mbit IE Comm Module	
Number: TIDA-010973 Rev: E2	Sheet Title:	
SVN Rev: 16154	Assembly Variant: 001	Sheet: 2 of 15
Drawn By:	File: TIDA-010973_SOM_BlockDiagram.SchDoc	Size: B
Engineer: Thomas Mauer	Contact: http://www.ti.com/support	

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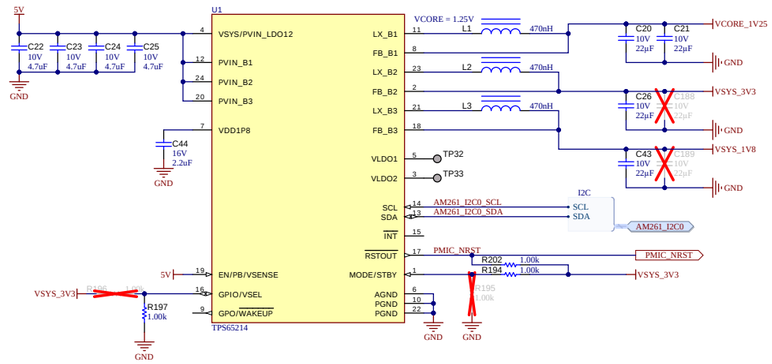
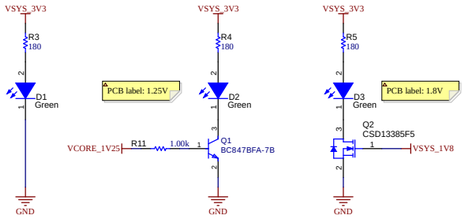
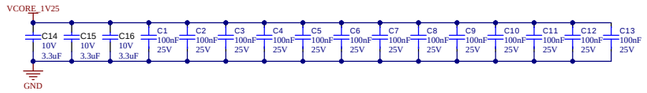


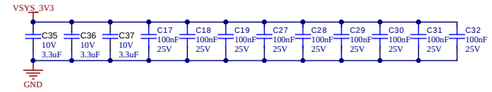
Power Good LEDs



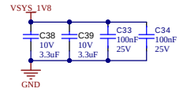
VDD 1V25 Core Digital



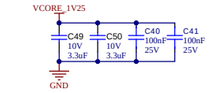
VDDSHV 3V3 Digital



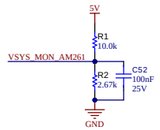
VDDSHV 1V8 Digital



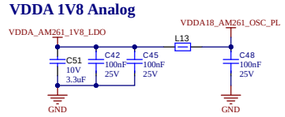
VDDAR[3:2] 1V25 SRAM Array



VSYS Voltage Monitor

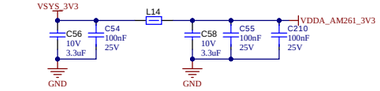


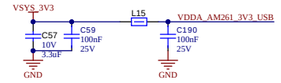
VDDA 1V8 Analog

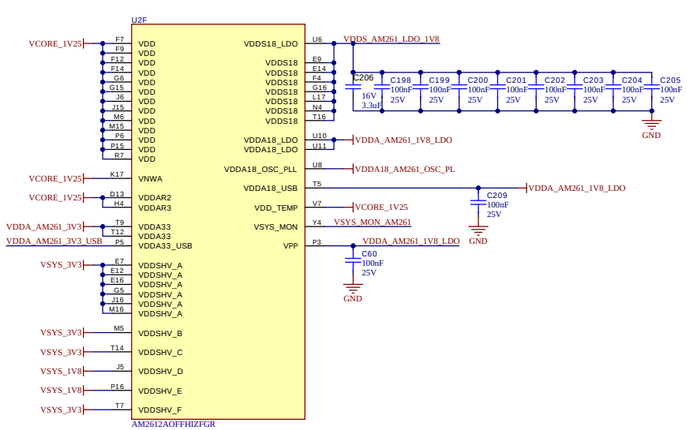


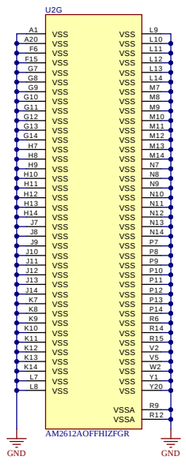
VNEA 1V2

VDDA 3V3 Analog









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Orderable: ChangeMe in variant	Designed for: Public Release — Mod. Date: 1/15/2026
TID #: TIDA-010973	Project Title: 100Mbit IE Comm Module
Number: TIDA-010973 Rev: E2	Sheet Title:
SVN Rev: 16175	Assembly Variant: 001 — Sheet: 3 of 15
Drawn By:	File: TIDA-010973_SOM_PMIC.SchDoc — Size: C
Engineer: Thomas Mauer	Contact: http://www.ti.com/support

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Length match the following busses
MII_RX, MII_TX, OSPI Flash, OSPI PSRAM, SD Card

Industrial Ethernet

MII0
MII
TXD[3..0] — PR0_MII0_TXD[3..0]
TXEN — PR0_MII0_TXEN
MTn_CLK — PR0_MII_MT0_CLK
RXD[3..0] — PR0_MII0_RXD[3..0]
RXDV — PR0_MII0_RXDV
MRn_CLK — PR0_MII_MR0_CLK
RXER — PR0_MII0_RXER
RXLINK — PR0_MII0_RXLINK
COL — PR0_MII0_COL
CRS — PR0_MII0_CRS
MDIO — MII_MDIO
MDC — MII_MDC
PHY_INT — ETH0_PHY_INT
PHY_RESET — ETH0_RST

U3A
SN74LVC2G08DCUR
AM261_PORZN
AM261_ETH0_RST
R6 10.0k
GND

MII1
MII
TXD[3..0] — PR0_MII1_TXD[3..0]
TXEN — PR0_MII1_TXEN
MTn_CLK — PR0_MII_MT1_CLK
RXD[3..0] — PR0_MII1_RXD[3..0]
RXDV — PR0_MII1_RXDV
MRn_CLK — PR0_MII_MR1_CLK
RXER — PR0_MII1_RXER
RXLINK — PR0_MII1_RXLINK
COL — PR0_MII1_COL
CRS — PR0_MII1_CRS
MDIO — MII_MDIO
MDC — ETH1_PHY_INT
PHY_INT — ETH1_RST
PHY_RESET

U3B
SN74LVC2G08DCUR
AM261_PORZN
AM261_ETH1_RST
R14 10.0k
GND

U3C
SN74LVC2G08DCUR
VSYS_3V3
C61 0.1uF 10V
GND

OSPI FLASH

OSPI0_FLASH
OSPI
OSPI_D[7..0] — OSPI0_D[7..0]
OSPI_CLK — OSPI0_CLK
OSPI_CSN0 — OSPI0_CSN0
OSPI_DQS — OSPI0_DQS
OSPI_ECC_FAIL — OSPI0_ECC_FAIL
OSPI_RSTN — OSPI0_RSTN
OSPI0_D0
OSPI0_D1
OSPI0_D2
OSPI0_D3
OSPI0_D4
OSPI0_D5
OSPI0_D6
OSPI0_D7

U29A
SN74AHC1G09DCKR
VSYS_1V8
R193 10.0k
R8 10.0k
VSYS_3V3
AM261_WARMRSTN

U29B
SN74AHC1G09DCKR
VSYS_3V3
C175 0.1uF 10V
GND

U6A
SN74LVC1G125DSFR
R7 10.0k
VSYS_3V3
OSPI_BUF_EN
OSPI0_RESET_OUT

U6B
SN74LVC1G125DSFR
VSYS_3V3
C62 0.1uF 10V
GND

OSPI PSRAM

OSPI1_PSRAM
OSPI
OSPI_D[7..0] — OSPI1_D[7..0]
OSPI_CLK — OSPI1_CLK
OSPI_CSN0 — OSPI1_CSN0
OSPI_DQS — OSPI1_DQS
OSPI_ECC_FAIL — OSPI1_RSTN
OSPI_RSTN
OSPI1_D0
OSPI1_D1
OSPI1_D2
OSPI1_D3
OSPI1_D4
OSPI1_D5
OSPI1_D6
OSPI1_D7

U4A
SN74AHC1G09DCKR
VSYS_1V8
R10 10.0k
R9 10.0k
VSYS_1V8
OSPI1_RESET_OUT
AM261_WARMRSTN

U4B
SN74AHC1G09DCKR
VSYS_3V3
C120 0.1uF 10V
GND

I2C IO Expanders

U7
TCA6408ARGTR
AM261_I2C0_SCL
AM261_I2C0_SDA
SCL
SDA
ADDR
INT
RESET
VCCI
VCCP
P0 — AM261_ETH1_RST
P1 — AM261_ETH0_RST
P2 — MDIO/MDC_MUX_SEL
P3
P4 — AM261_USB0_MUX_SEL
P5 — SEL_HPI_FSI
P6 — SEL_HPI_SPI
P7
EP
GND
TP6
TP29
R15 10.0k
R99 10.0k
R100 10.0k
VSYS_3V3
C176 10V 0.1uF
C121 10V 0.1uF
GND
I2C address: 0x21

AM261x SOP[3:0]

SOP_RESET
SOP[3..0] — AM261_SOP[3..0]
PORZN_PB — PORZ_PB
PORZN — AM261_PORZN
WARMRSTN — AM261_WARMRSTN
AM261_SOP0 R16 10.0k PR1_PRU1_GPIO11
AM261_SOP1 R120 10.0k PR1_PRU1_GPIO12
AM261_SOP2 R121 10.0k PR1_PRU0_GPIO9
AM261_SOP3 R123 10.0k PR1_PRU0_GPIO0
Place as close to MCU as possible: R16, R120, R121, R123

POR Generation

U31A
SN74LVC1G08DRLR
PMIC_NRST
PORZ_PB
AM261_PORZN
R181 10.0k
GND

U31B
SN74LVC1G08DRLR
VSYS_3V3
C123 0.1uF 10V
GND

USB

USB2_0
USB_DP — AM261_USB0_D_P
USB_DM — AM261_USB0_D_N
USB_DRVVBUS — AM261_USB0_DRVVBUS
USB_MUX_SEL — AM261_USB0_MUX_SEL
USB0_VBUS_OC — AM261_USB0_VBUS_OC

AM261 JTAG

JTAG_UART
TCK — AM261_TCK
TDI — AM261_TDI
TDO — AM261_TDO
TMS — AM261_TMS
UART_RX — AM261_UART0_RXD
UART_TX — AM261_UART0_TXD
R212 22

U2B
AM2612AOFFHIZFGR
TCK — D4
TDI — C5
TDO — E5
TMS — D6
TEMPCAL — W3
ATESTV1 — W5

U2E — AM2612AOFFHIZFGR

UI_LED1_R — GPIO0
UI_LED1_G — GPIO1
OSPI0_D0 — GPIO2
PR1_PRU1_GPIO11 — GPIO3
PR1_PRU1_GPIO12 — GPIO4
HPI_IRQ0 — GPIO5
HPI_IRQ1 — GPIO6
OSPI0_D2 — GPIO7
OSPI0_D6 — GPIO8
OSPI0_DQS — GPIO9
OSPI0_CLK — GPIO10
PR1_PRU0_GPIO2 — GPIO11
PR1_PRU0_GPIO9 — GPIO12
PR1_PRU0_GPIO0 — GPIO13
PR1_PRU0_GPIO1 — GPIO14
PR1_PRU1_GPIO4 — GPIO15
PR1_PRU1_GPIO3 — GPIO16
PR1_PRU1_GPIO16 — GPIO17
PR1_PRU1_GPIO15 — GPIO18
PR1_PRU1_GPIO6 — GPIO19
PR1_PRU1_GPIO8 — GPIO20
HPI_IRQ2 — GPIO21
ETH1_PHY_INT — GPIO22
PR1_PRU0_GPIO17 — GPIO23
PR1_PRU0_GPIO18 — GPIO24
PR1_PRU1_GPIO19 — GPIO25
PR1_PRU0_GPIO7 — GPIO26
AM261_UART0_RXD — GPIO27
AM261_UART0_TXD — GPIO28
OSPI1_CLK — GPIO29
OSPI1_D0 — GPIO30
OSPI1_D1 — GPIO31
OSPI1_D2 — GPIO32
OSPI1_D3 — GPIO33
OSPI1_D4 — GPIO34
OSPI1_D5 — GPIO35
OSPI1_D6 — GPIO36
OSPI1_D7 — GPIO37
OSPI1_CSN0 — GPIO38
OSPI1_DQS — GPIO39
PR0_IEP0_EDC_SYNC_OUT1 — GPIO40
CPSW_MDIO0_MDIO — GPIO41
CPSW_MDIO0_MDC — GPIO42
PR1_PRU0_GPIO5 — GPIO43
PR1_PRU0_GPIO8 — GPIO44
PR1_PRU0_GPIO4 — GPIO45
PR1_PRU0_GPIO3 — GPIO46
PR1_PRU0_GPIO16 — GPIO47
PR1_PRU0_GPIO15 — GPIO48
PR1_PRU0_GPIO11 — GPIO49
PR1_PRU0_GPIO12 — GPIO50
PR1_PRU0_GPIO13 — GPIO51
PR1_PRU0_GPIO14 — GPIO52
PR1_PRU1_GPIO5 — GPIO53
AM261_USB0_VBUS_OC — GPIO54
OSPI_BUF_EN — GPIO55
GPIO56
GPIO57
GPIO58
GPIO59
GPIO60
OSPI0_RESET_OUT — GPIO61
OSPI0_CSN0 — GPIO62
UI_LED2_R — GPIO63
UI_LED2_G — GPIO64
OSPI0_ECC_FAIL — GPIO65
OSPI1_RESET_OUT — GPIO66
OSPI0_D5 — GPIO67
OSPI0_D7 — GPIO68
OSPI0_D3 — GPIO69
GPIO70 — OSPI0_D1
GPIO71 — PR1_PRU1_GPIO0
GPIO72 — PR1_PRU1_GPIO1
GPIO73 — PR1_PRU1_GPIO2
GPIO74 — PR1_PRU1_GPIO9
GPIO75
GPIO76 — OSPI0_D4
GPIO77 — R183 22 MMC0_CLK
GPIO78 — R227 22 MMC0_CMD
GPIO79 — R228 22 MMC0_D0
GPIO80 — R229 22 MMC0_D1
GPIO81 — R230 22 MMC0_D2
GPIO82 — R231 22 MMC0_D3
GPIO83 — MMC0_CD
GPIO84 — PR0_MII_MDIO
GPIO85 — PR0_MII_MDC
GPIO86 — PR0_MII0_RXER
GPIO87 — PR0_MII0_COL
GPIO88 — PR0_MII0_CRS
GPIO89 — PR0_MII0_RXLINK
GPIO90 — PR0_MII_MR0_CLK
GPIO91 — PR0_MII0_RXDV
GPIO92 — PR0_MII0_RXD0
GPIO93 — PR0_MII0_RXD1
GPIO94 — PR0_MII0_RXD2
GPIO95 — PR0_MII0_RXD3
GPIO96 — PR0_MII_MT0_CLK
GPIO97 — PR0_MII0_TXEN
GPIO98 — R208 0 PR0_MII0_TXD0
GPIO99 — R209 0 PR0_MII1_TXD0
GPIO100 — R210 0 PR0_MII0_TXD2
GPIO101 — R211 0 PR0_MII0_TXD3
GPIO102 — PR0_MII1_RXER
GPIO103 — PR0_MII1_COL
GPIO104 — PR0_MII1_CRS
GPIO105 — PR0_MII1_RXLINK
GPIO106 — PR0_MII_MR1_CLK
GPIO107 — PR0_MII1_RXDV
GPIO108 — PR0_MII1_RXD0
GPIO109 — PR0_MII1_RXD1
GPIO110 — PR0_MII1_RXD2
GPIO111 — PR0_MII1_RXD3
GPIO112 — PR0_MII_MT1_CLK
GPIO113 — PR0_MII1_TXEN
GPIO114 — R234 0 PR0_MII1_TXD0
GPIO115 — R235 0 PR0_MII1_TXD1
GPIO116 — R236 0 PR0_MII1_TXD2
GPIO117 — R237 0 PR0_MII1_TXD3
GPIO118 — PR0_IEP0_EDC_SYNC_OUT0
GPIO119 — HPI_IRQ3
GPIO120 — AM261_USB0_DRVVBUS
GPIO121 — PR0_IEP0_EDC_LATCH_IN1
GPIO122 — PR1_PRU1_GPIO10
GPIO123 — PR1_PRU0_GPIO10
GPIO124 — PR1_PRU1_GPIO13
GPIO125 — PR1_MDIO0_MDC
GPIO126 — PR1_MDIO0_MDIO
GPIO127 — PR1_PRU1_GPIO14
GPIO128 — R238 0 PR1_PRU1_GPIO17
GPIO129 — PR1_PRU1_GPIO18
GPIO130 — PR1_PRU0_GPIO19
GPIO131 — PR1_PRU0_GPIO20
GPIO132 — PR1_PRU1_GPIO7
GPIO133 — AM261_I2C0_SDA
GPIO134 — AM261_I2C0_SCL
GPIO135 — USER_INT
GPIO136 — PR0_IEP0_EDC_LATCH_IN0
GPIO137 — AM261_USB0_D_P
GPIO138 — AM261_USB0_D_N
GPIO139
GPIO140

1.8V IOs: GPIO 7-10, 29-41, 57-70, 76, 138

1.8V IO: GPIO40/GPIO41

Important note: ICSS M11 TX port are swapped for industrial Ethernet firmware support! See TI design guide for further details.

I2C pull-up

VSYS_3V3
R217 4.70k
R13 4.70k

MMC

MMC0
MMC_CMD — MMC0_CMD
MMC_CLK — MMC0_CLK
MMC_CD — MMC0_CD
MMC_D[3..0] — MMC0_D[3..0]
MMC0_D0
MMC0_D1
MMC0_D2
MMC0_D3

HPI

HPI
INT[3..0] — HPI_IRQ[3..0]
SYNC[1..0] — PR0_IEP0_EDC_SYNC_OUT[1..0]
LATCH[1..0] — PR0_IEP0_EDC_LATCH_IN[1..0]
MDIO — PR1_MDIO0_MDIO
MDC — PR1_MDIO0_MDC
PRU0_GPIO[20..0] — PR1_PRU0_GPIO[20..0]
PRU1_GPIO[19..0] — PR1_PRU1_GPIO[19..0]
SEL_HPI_FSI
SEL_HPI_SPI
HPI_RESET
HPI_IRQ0
HPI_IRQ1
HPI_IRQ2
HPI_IRQ3
PR0_IEP0_EDC_SYNC_OUT1
PR0_IEP0_EDC_SYNC_OUT0
PR0_IEP0_EDC_LATCH_IN0
PR0_IEP0_EDC_LATCH_IN1

U47A
SN74AHC1G08DRLR
AM261_PORZN
AM261_WARMRSTN

U47B
SN74AHC1G08DRLR
VSYS_3V3
C178 0.1uF 10V
GND

IE_UI_CTRL

AM261_I2C0_SDA — I2C0_SDA
AM261_I2C0_SCL — I2C0_SCL
PR1_PRU0_GPIO18 — I2C1_SDA
PR1_PRU0_GPIO17 — I2C1_SCL
USER_INT — USER_INT
UI_LED1_R — UI_LED1_R
UI_LED1_G — UI_LED1_G
UI_LED2_R — UI_LED2_R
UI_LED2_G — UI_LED2_G
AM261_SAFETY_ERR — UI_LED_SAFTY_ERR
IE_UI_CTRL

MDIO ICSS0/CPSW MUX

U5
TSSA23159DGSR
VSYS_3V3
C63 16V 0.1uF
GND
PR0_MII_MDIO
CPSW_MDIO0_MDIO_3V3
PR0_MII_MDC
CPSW_MDIO0_MDC
MII_MDIO
MDIO/MDC_MUX_SEL
MII_MDC

I2C

SDA
SCL
R17 4.70k
R219 4.70k
VSYS_3V3
AM261_I2C0
AM261_I2C0_SDA
AM261_I2C0_SCL

U2C — AM2612AOFFHIZFGR

AM261_PORZN — POR
AM261_WARMRSTN — WARMRST
CLK_25M_MCU — XTAL_XI
XTAL_XO
NC — U17
SAFETY_ERROR — E3 — AM261_SAFETY_ERR

Clock Buffer with BAW oscillator

VSYS_3V3
L17
C64 16V 0.1uF
C65 16V 0.1uF
C66 16V 0.1uF
C67 16V 0.1uF
GND
VSYS_1V8
L18
C68 16V 0.1uF
GND

U8
LMK3C0105V33RERR
VDD
VDD
VDD
VDDO_0
VDDO_1
OE
OTP_SEL0/SCL
OTP_SEL1/SDA
I2C_ADDR
REF_CTRL(OUTE)
OUTA — R18 33.0 — CLK_25M_PHY2
OUTB — R19 33.0 — CLK_25M_PHY1
OUTC — R20 33.0 — CLK_25M_MCU
OUTD — R198 33.0 — TP1
NC
NC
DAP
AM261_I2C0_SCL
AM261_I2C0_SDA
R22 0
R21 10.0k
GND
I2C address: 0x69 / 0xD2

PHY: 3.3V level
AM261x: 1.8V level

U2A — AM2612AOFFHIZFGR

ADC0_AIN0 — W13
ADC0_AIN1 — V13
ADC0_AIN2 — W14
ADC0_AIN3 — V14
ADC0_AIN4 — Y14
ADC0_AIN5 — W15
ADC0_AIN6 — Y15
ADC1_AIN0 — W12
ADC1_AIN1 — V12
ADC1_AIN2 — Y11
ADC1_AIN3 — W11
ADC1_AIN4 — Y10
ADC1_AIN5 — W10
ADC1_AIN6 — W9
ADC2_AIN0 — W8
ADC2_AIN1 — Y7
ADC2_AIN2 — Y6
ADC2_AIN3 — W7
ADC2_AIN4 — W6
ADC2_AIN5 — V9
ADC2_AIN6 — Y5
ADC_VREFHI_G0 — Y12
ADC_VREFHI_G1 — Y8
ADC_VREFLO_G0 — Y13
ADC_VREFLO_G1 — Y9
ADC_CAL0 — V16
C212 10V 3.3uF
C213 100nF 25V
C214 10V 3.3uF
C215 100nF 25V
GND

U2D — AM2612AOFFHIZFGR

DAC_OUT — W4
DAC_VREF0 — U15
C216 10V 3.3uF
C217 100nF 25V
VDDA_AM261_1V8_LDO
GND

U53 — TXS0101DCKR

VSYS_1V8
C207 10V 0.1uF
GND
CPSW_MDIO0_MDIO
VCCA
A
OE
VCCB
B
GND
VSYS_3V3
C208 10V 0.1uF
GND
CPSW_MDIO0_MDIO_3V3

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Orderable: ChangeMe in variant	Designed for: Public Release — Mod. Date: 2/13/2026
TID #: TIDA-010973	Project Title: 100Mbit IE Comm Module
Number: TIDA-010973 — Rev: E2	Sheet Title:
SVN Rev.: 16175 [Locally Modified]	Assembly Variant: 001 — Sheet: 4 of 15
Drawn By:	File: TIDA-010973_SOM_MCU.SchDoc — Size: C
Engineer: Thomas Mauer	Contact: http://www.ti.com/support

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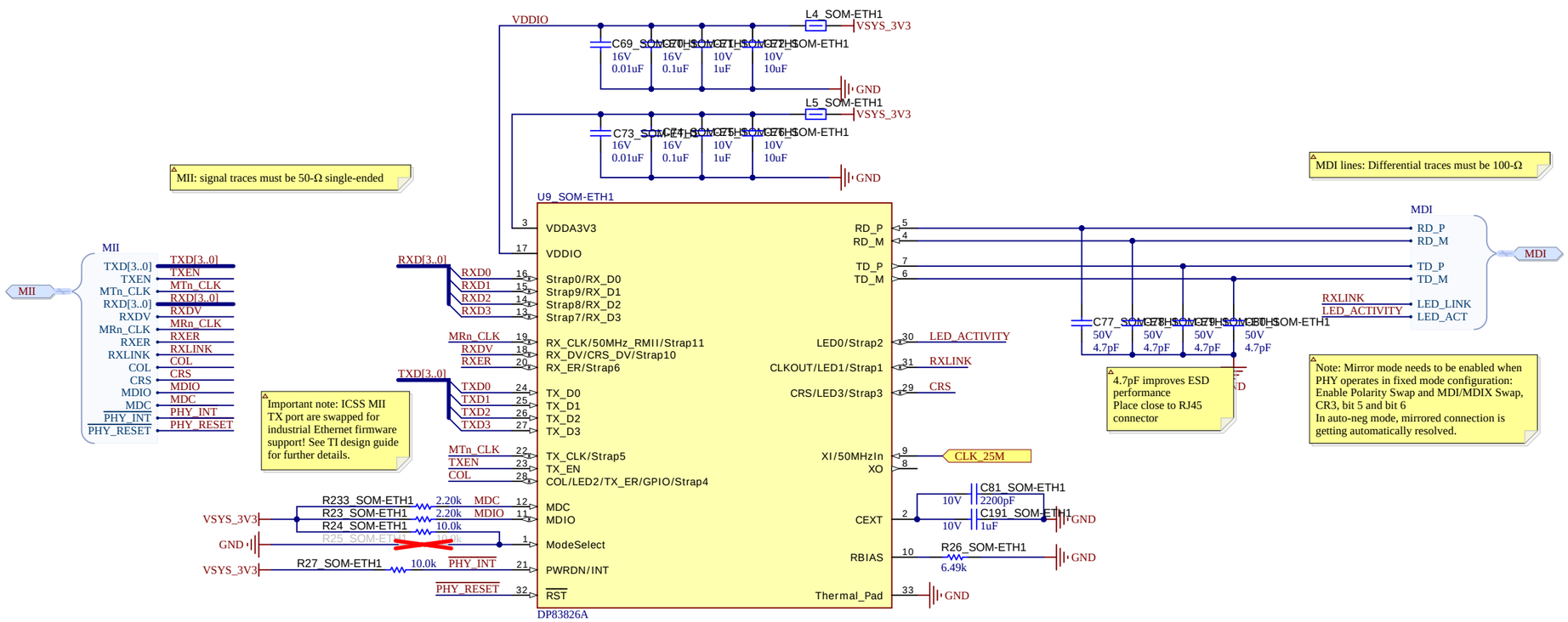
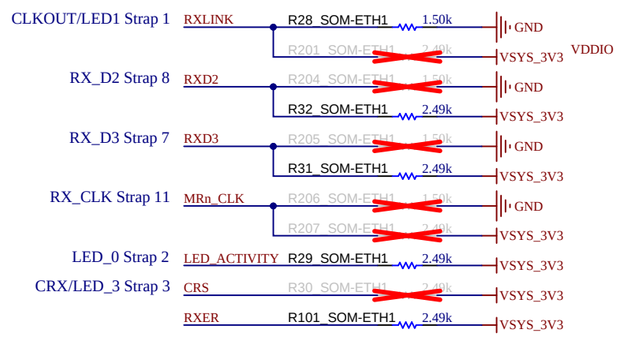


Bootstrap



Bootstrap:
PHY1 ID: 1
PHY2 ID: 3
Enhanced Mode
Odd nibble detection disabled
FLD enabled
FLD: RX_ER and Signal Detection
DISABLE_CLKOUT
Bootstrap resistors can be minimized pending

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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 1/16/2026
TID #: TIDA-010973	Project Title: 100Mbit IE Comm Module	
Number: TIDA-010973 Rev: E2	Sheet Title:	
SVN Rev: 16175	Assembly Variant: 001	Sheet: 5 of 15
Drawn By:	File: TIDA-010973_SOM_Ethernet.SchDoc	Size: B
Engineer: Thomas Mauer	Contact: http://www.ti.com/support	

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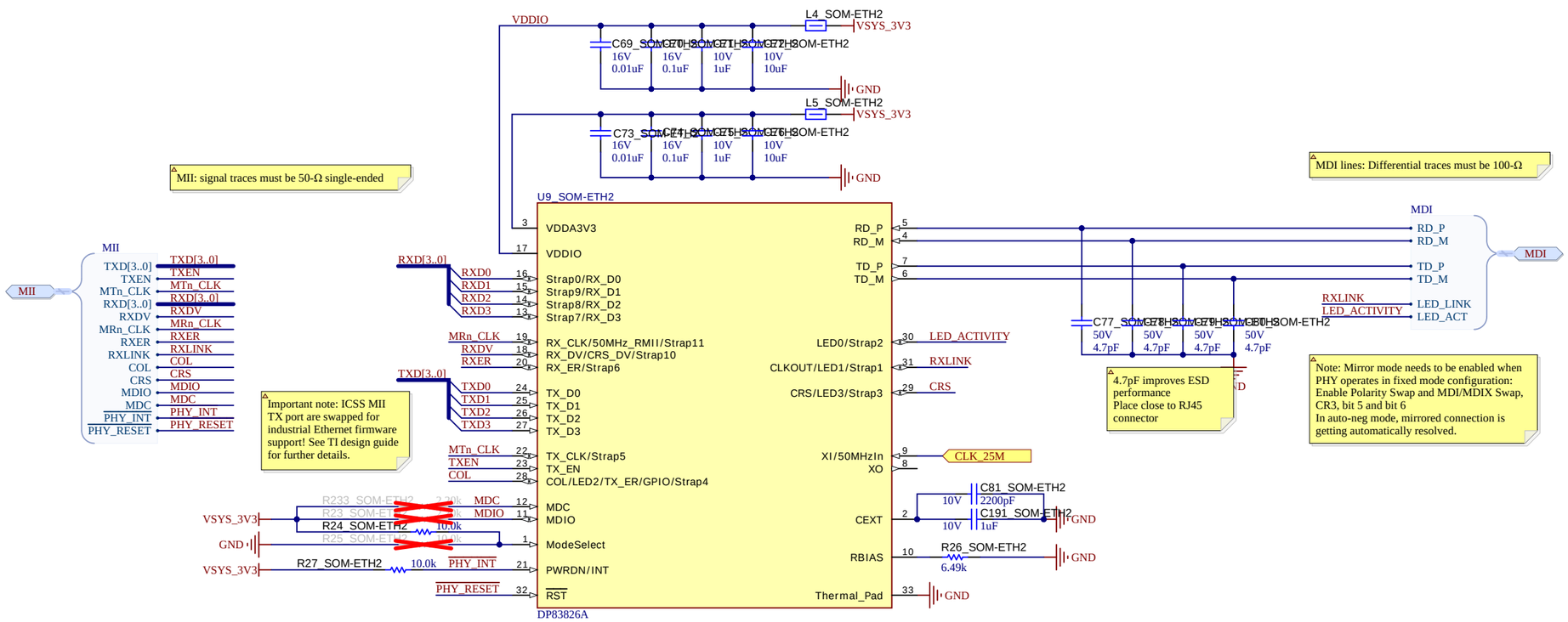
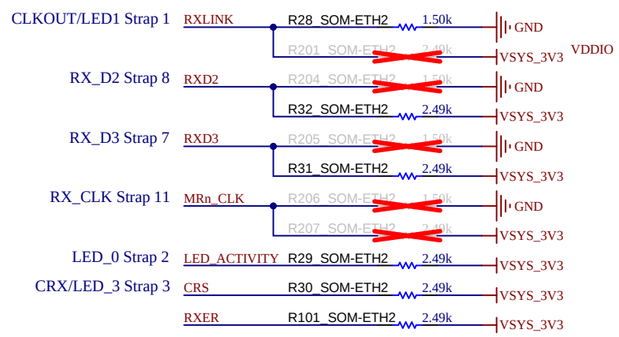


Bootstrap



Bootstrap:
PHY1 ID: 1
PHY2 ID: 3
Enhanced Mode
Odd nibble detection disabled
FLD enabled
FLD: RX_ER and Signal Detection
DISABLE_CLKOUT
Bootstrap resistors can be minimized pending

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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 1/16/2026
TID #: TIDA-010973	Project Title: 100Mbit IE Comm Module	
Number: TIDA-010973 Rev: E2	Sheet Title:	
SVN Rev: 16175	Assembly Variant: 001	Sheet: 5 of 15
Drawn By:	File: TIDA-010973_SOM_Ethernet.SchDoc	Size: B
Engineer: Thomas Mauer	Contact: http://www.ti.com/support	

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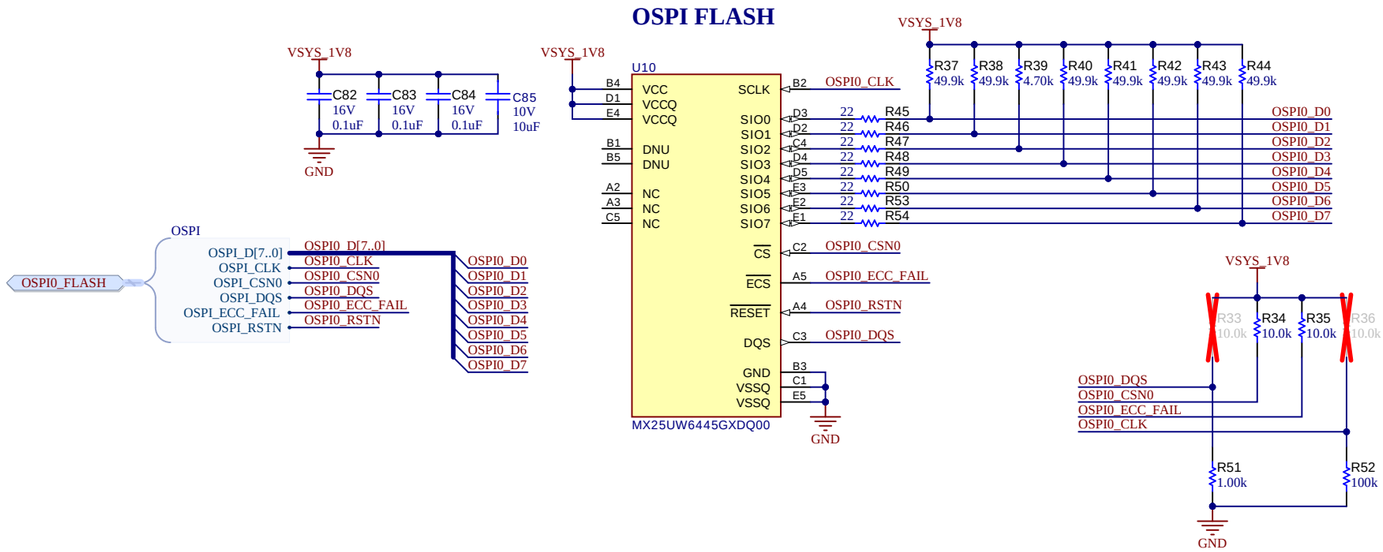

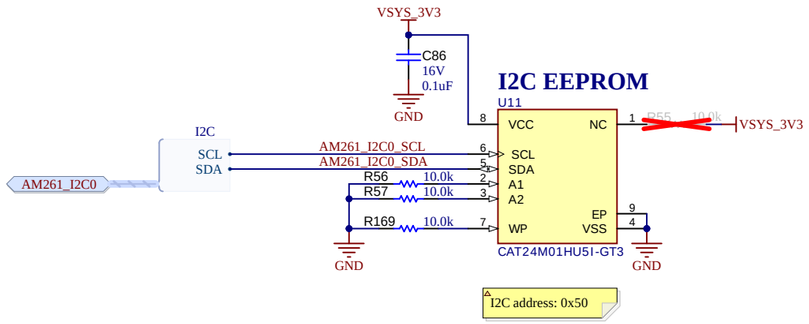

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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 8/8/2025
TID #: TIDA-010973	Project Title: 100Mbit IE Comm Module	
Number: TIDA-010973 Rev: E2	Sheet Title:	
SVN Rev: 16154	Assembly Variant: 001	Sheet: 6 of 15
Drawn By:	File: TIDA-010973_SOM-Memory.SchDoc	Size: B
Engineer: Thomas Mauer	Contact: http://www.ti.com/support	

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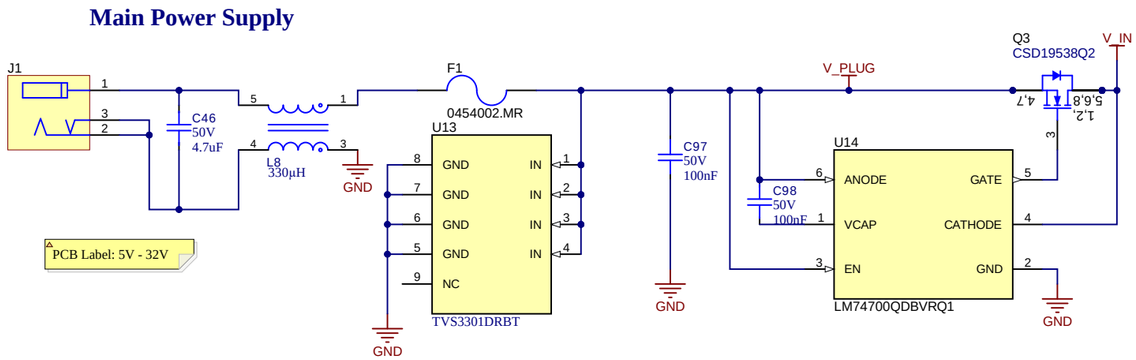
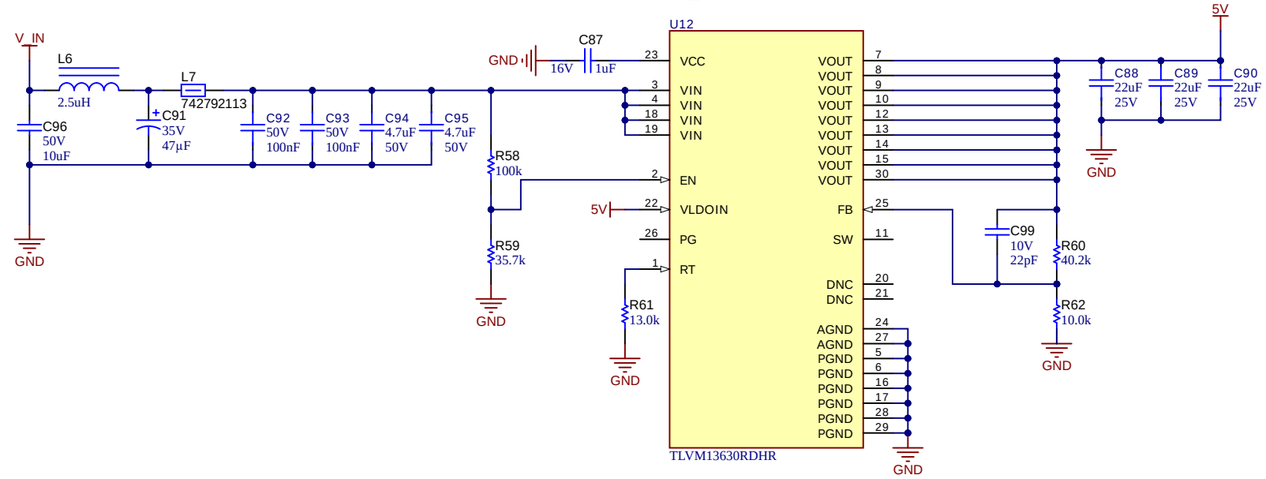
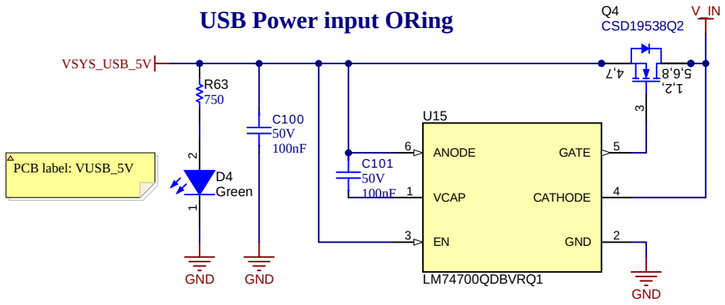
Main Power Supply



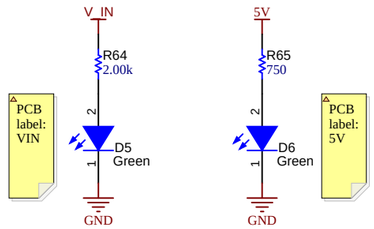
V_IN to 5V



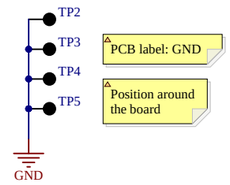
USB Power input ORing



Power Good LEDs



GND Test Points



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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 1/15/2026
TID #: TIDA-010973	Project Title: 100Mbit IE Comm Module	
Number: TIDA-010973 Rev: E2	Sheet Title:	
SVN Rev:	Assembly Variant: 001	Sheet: 7 of 15
Drawn By:	File: TIDA-010973_SystemPower.SchDoc	Size: B
Engineer: Thomas Mauer	Contact: http://www.ti.com/support	

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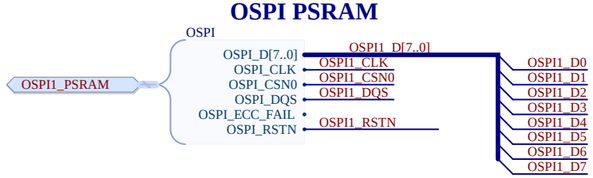
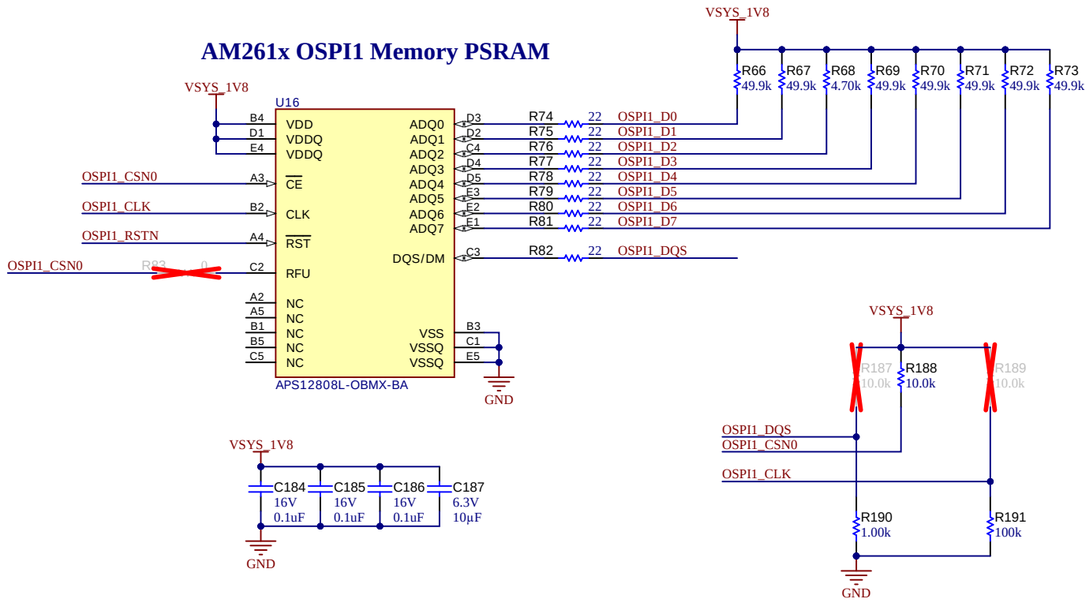
OSPI PSRAM



AM261x OSPI1 Memory PSRAM



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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 7/17/2025
TID #: TIDA-010973	Project Title: 100Mbit IE Comm Module	
Number: TIDA-010973 Rev: E2	Sheet Title:	
SVN Rev:	Assembly Variant: 001	Sheet: 8 of 15
Drawn By:	File: TIDA-010973_Memory.SchDoc	Size: B
Engineer: Thomas Mauer	Contact: http://www.ti.com/support	

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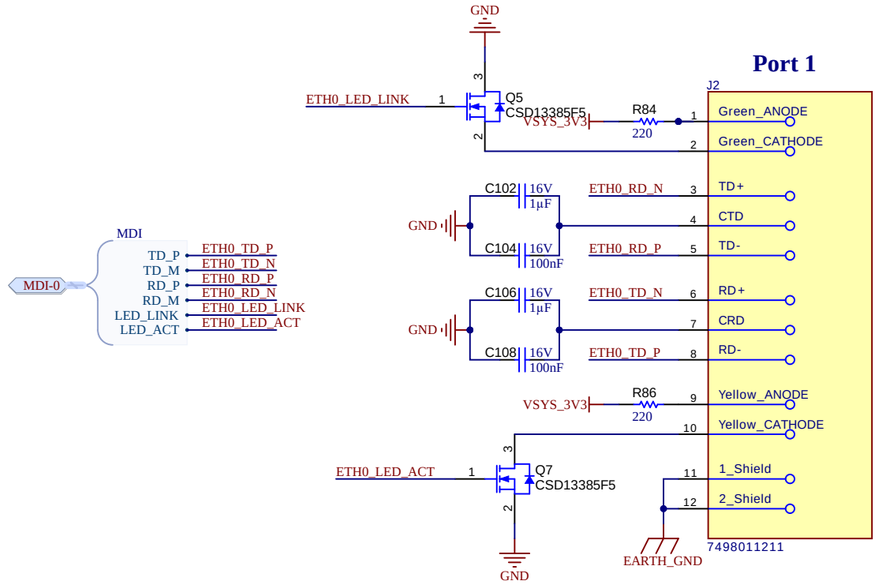
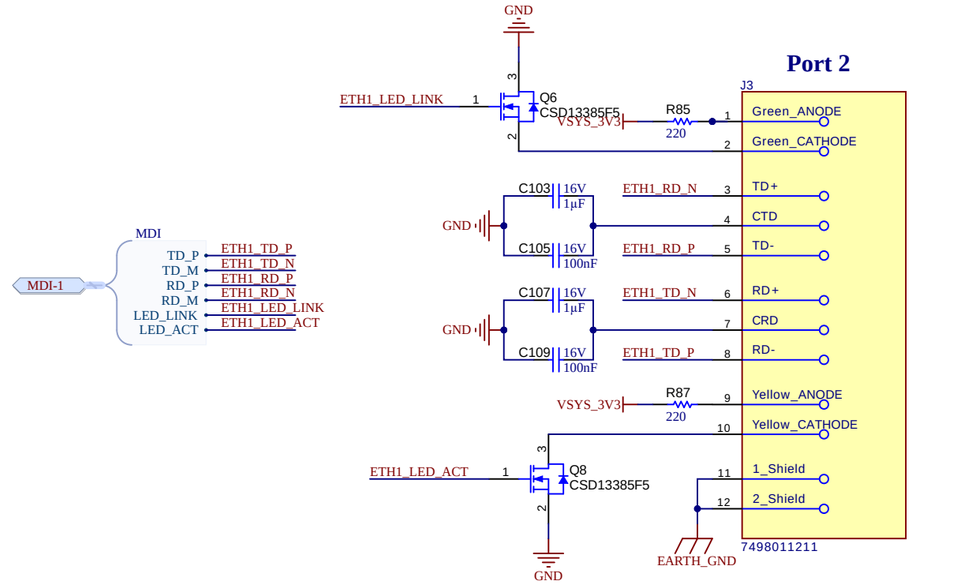
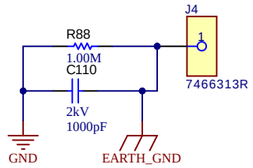


Note: Connected MDI to RJ45 in mirrored moded to simplify routing. See dev note at SOM Ethernet schematic for further information.

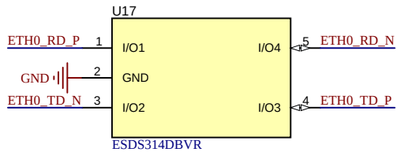


Note: Connected MDI to RJ45 in mirrored moded to simplify routing. See dev note at SOM Ethernet schematic for further information.

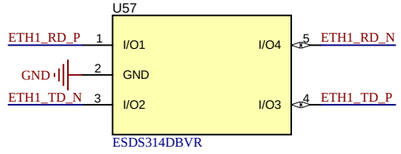
EMC Test Port



ESD protection



ESD protection



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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 1/15/2026
TID #: TIDA-010973	Project Title: 100Mbit IE Comm Module	
Number: TIDA-010973 Rev: E2	Sheet Title:	
SVN Rev:	Assembly Variant: 001	Sheet: 9 of 15
Drawn By:	File: TIDA-010973_EthernetConnector.SchDoc	Size: B
Engineer: Thomas Mauer	Contact: http://www.ti.com/support	http://www.ti.com

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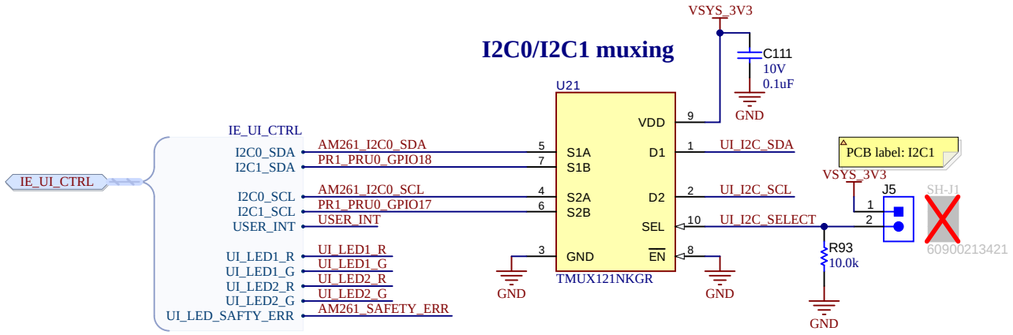
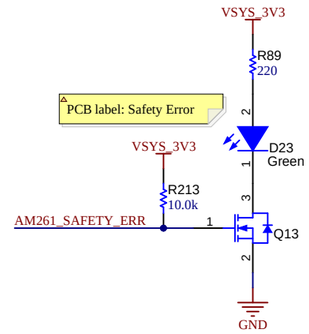
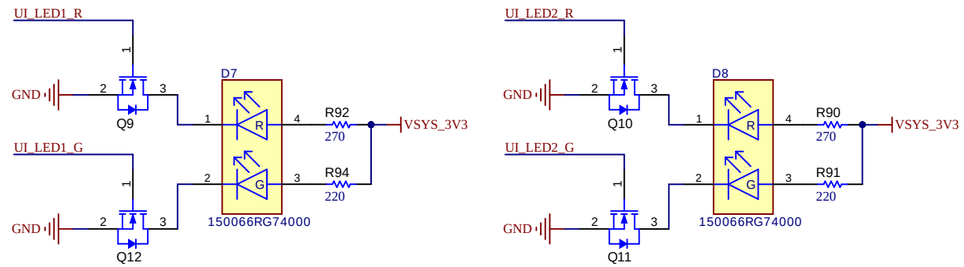
I2C0/I2C1 muxing



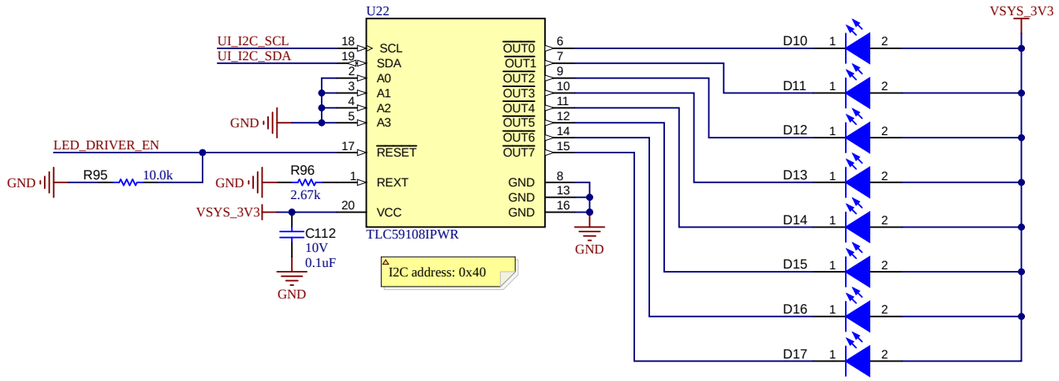
Safety Error



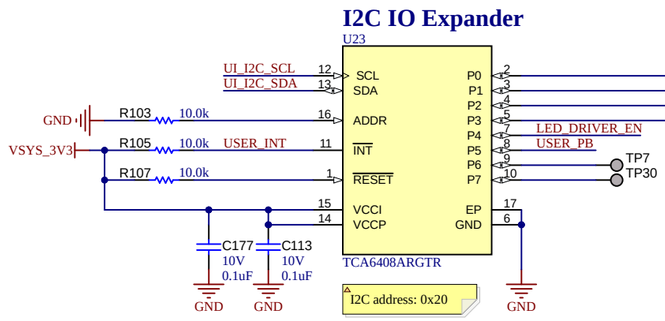
Industrial LEDs



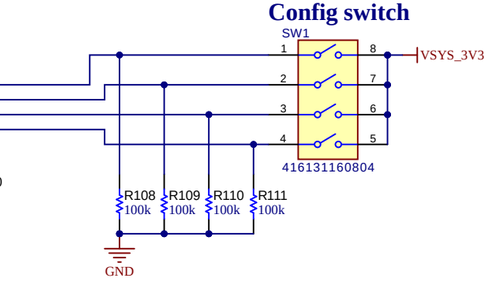
8-bit OUTPUT LEDs



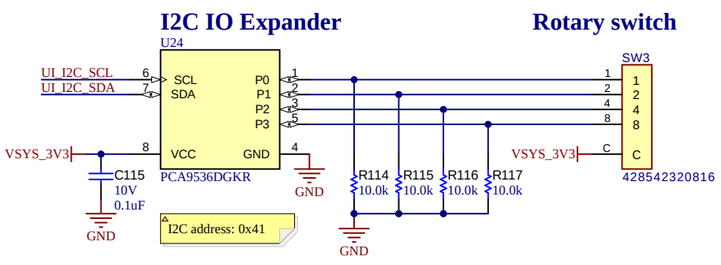
I2C IO Expander



Config switch

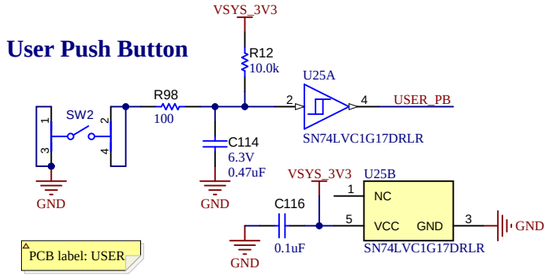


I2C IO Expander



Rotary switch

User Push Button



Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 1/15/2026
TID #: TIDA-010973	Project Title: 100Mbit IE Comm Module	
Number: TIDA-010973 Rev: E2	Sheet Title:	
SVN Rev: 16175	Assembly Variant: 001	Sheet: 10 of 15
Drawn By:	File: TIDA-010973_SystemLED.SchDoc	Size: B
Engineer: Thomas Mauer	Contact: http://www.ti.com/support	

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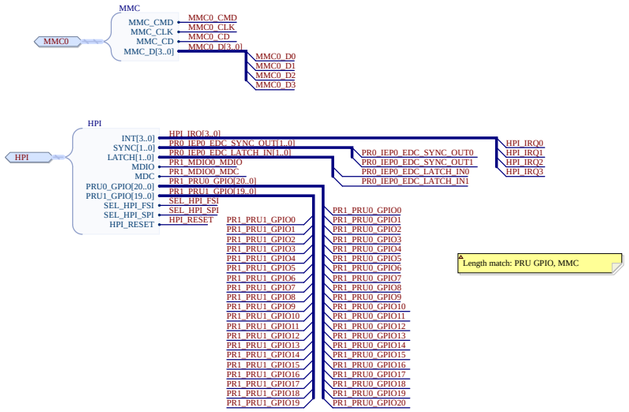
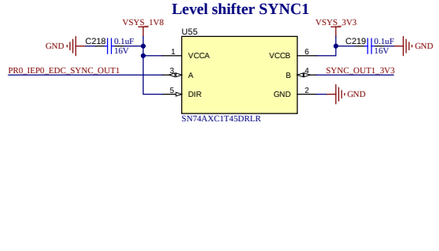
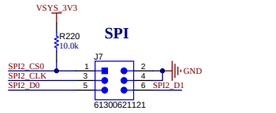
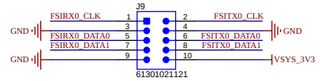
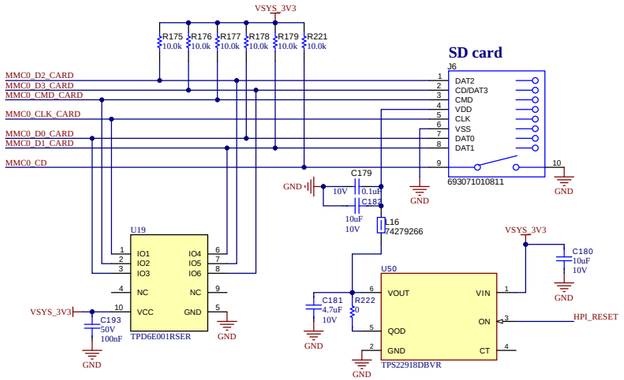
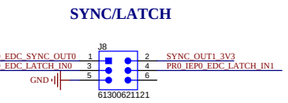


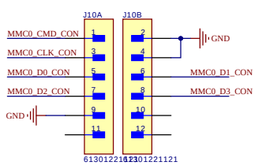




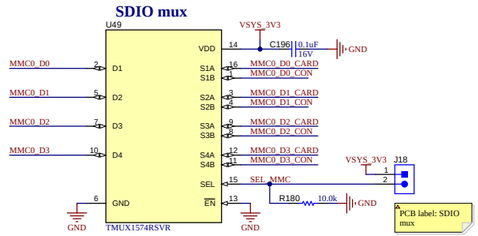


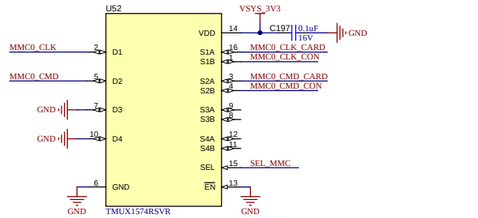


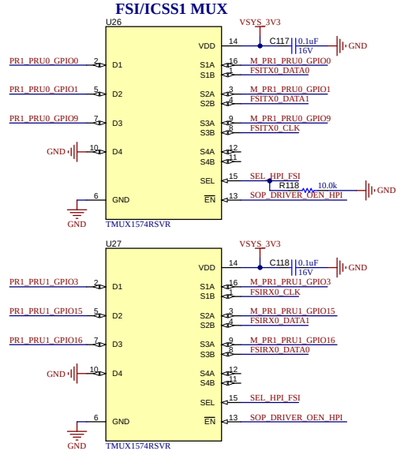


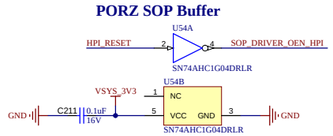


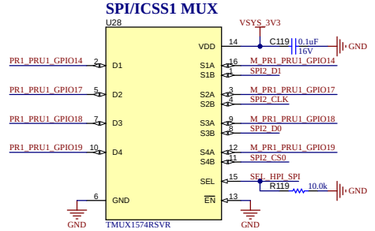
1.25V











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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 10/21/2025	
TID #: TIDA-010973	Project Title: 100Mbit IE Comm Module		
Number: TIDA-010973 Rev: E2	Sheet Title:		
SVN Rev:	Assembly Variant: 001	Sheet: 11 of 15	
Drawn By:	File: TIDA-010973_HostPortInterface.SchDoc	Size: C	
Engineer: Thomas Mauer	Contact: http://www.ti.com/support	© Texas Instruments 2026	

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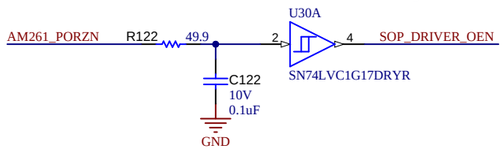
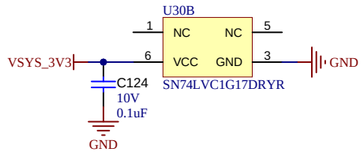
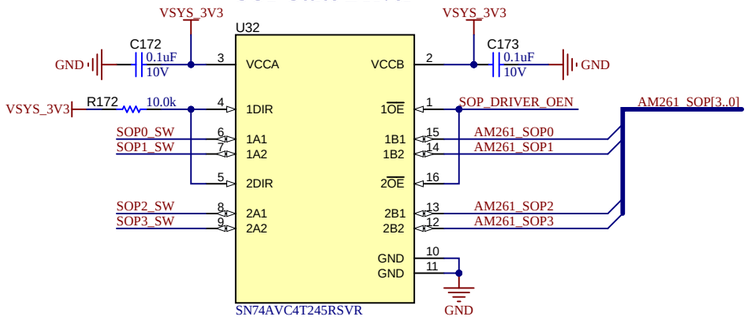
PORZ SOP Driver RC Delay

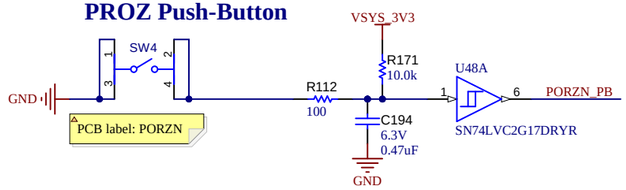




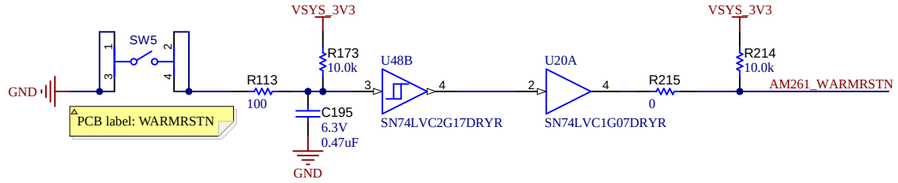
SOP State Driver



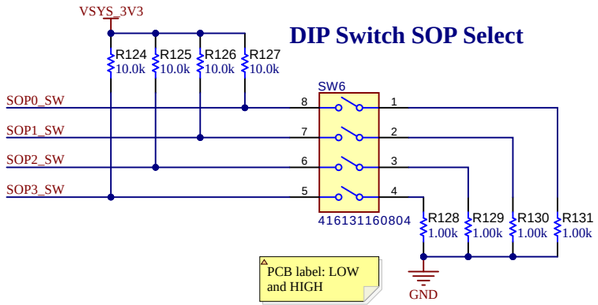
PROZ Push-Button

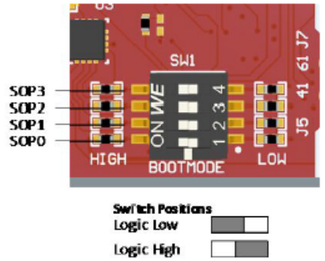


WARMRSTN Push-Button

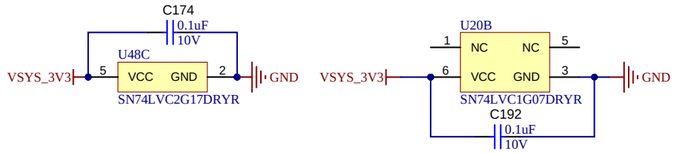


DIP Switch SOP Select

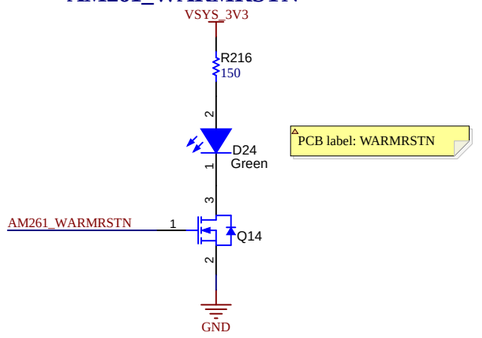




SOP[3:0] switch description:
- Switch "off" SOPx high
- Switch "on" SOPx low
- SOP[3:0] = 0b0001 -> UART
- SOP[3:0] = 0b1100 -> OSPI0(1S->8D)
- SOP[3:0] = 0b0011 -> OSPI0(8S),SDR
- SOP[3:0] = 0b1011 -> DevBoot
- SOP[3:0] = 0b1110 -> USB2.0 DFU



AM261_WARMRSTN



Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 1/15/2026
TID #: TIDA-010973	Project Title: 100Mbit IE Comm Module	
Number: TIDA-010973 Rev: E2	Sheet Title:	
SVN Rev:	Assembly Variant: 001	Sheet: 12 of 15
Drawn By:	File: TIDA-010973_BootConfig.SchDoc	Size: B
Engineer: Thomas Mauer	Contact: http://www.ti.com/support	http://www.ti.com

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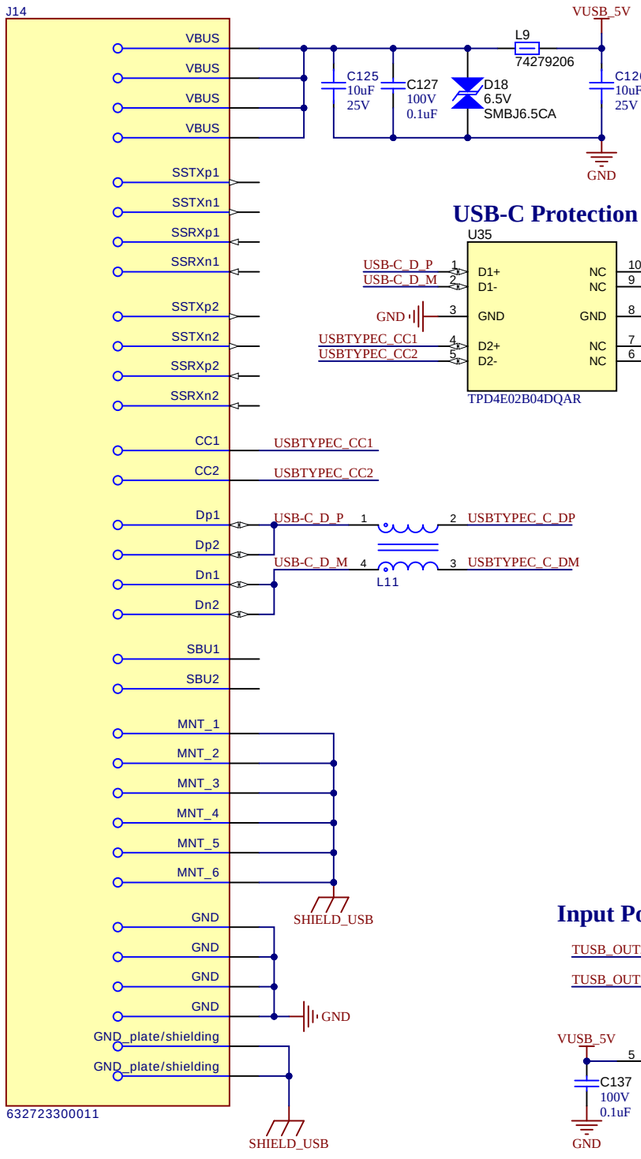
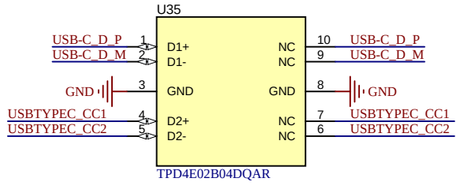
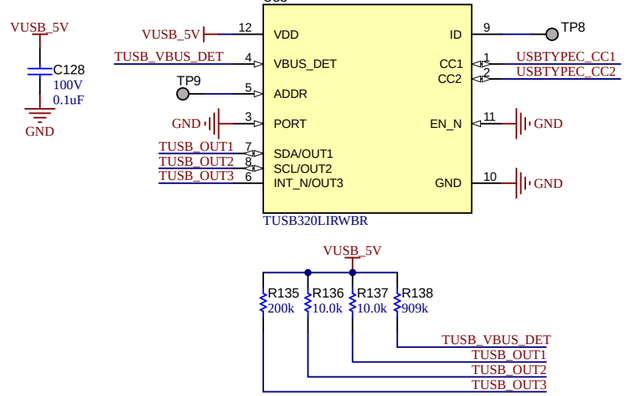
USB Type-C Power Input: 5.0V, 3.1A



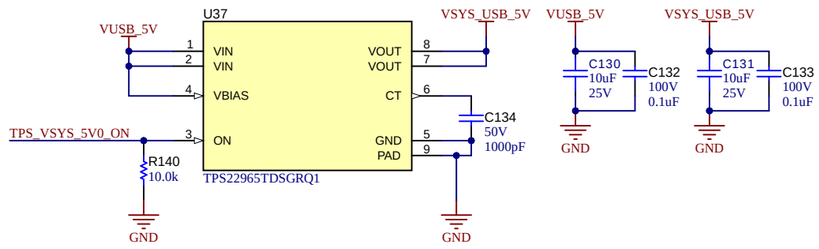
USB-C Protection



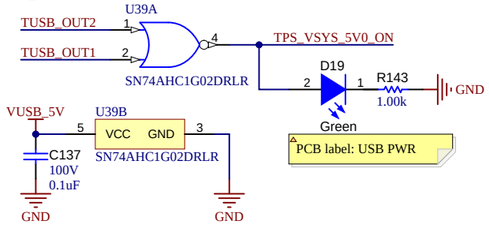
USB Type-C CC Logic Controller

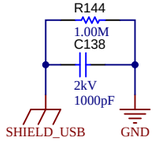


USB 5.0V Input Power Load Switch (4A max)

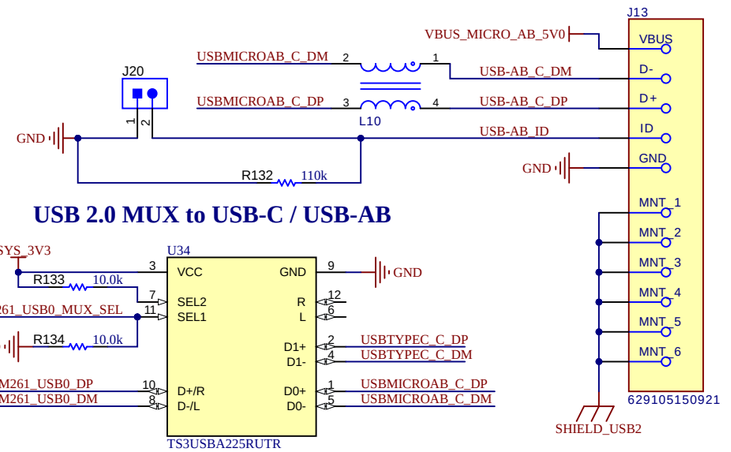


Input Power Load Switch Enable

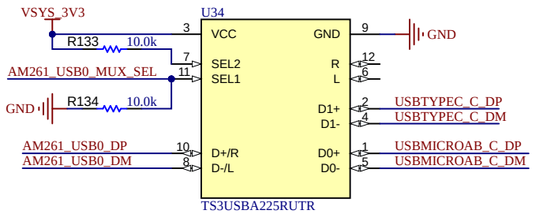




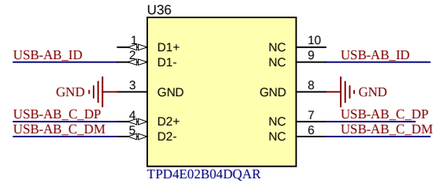
USB Type-AB

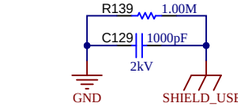


USB 2.0 MUX to USB-C / USB-AB

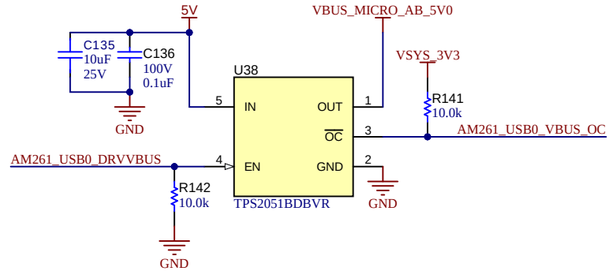


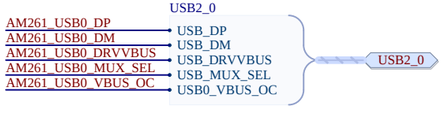
USB-AB Protection





USB micro AB Power-Distribution Switch





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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 1/15/2026
TID #: TIDA-010973	Project Title: 100Mbit IE Comm Module	
Number: TIDA-010973 Rev: E2	Sheet Title:	
SVN Rev:	Assembly Variant: 001	Sheet: 13 of 15
Drawn By:	File: TIDA-010973_USB2.SchDoc	Size: B
Engineer: Thomas Mauer	Contact: http://www.ti.com/support	

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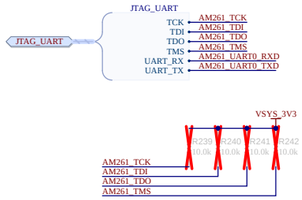
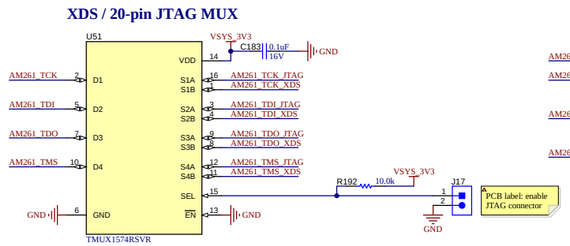
TM4C1294NCPDT datasheet

XDS1100 collateral

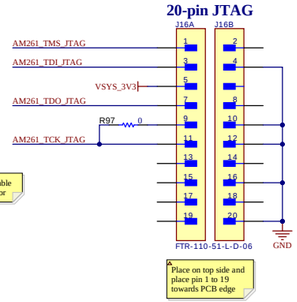
JTAG/UART i/F



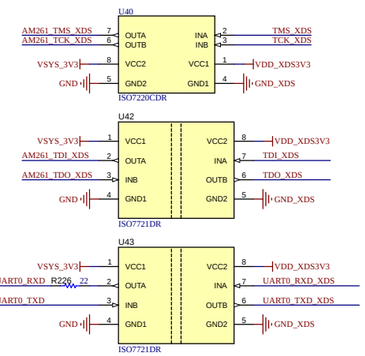
XDS / 20-pin JTAG MUX



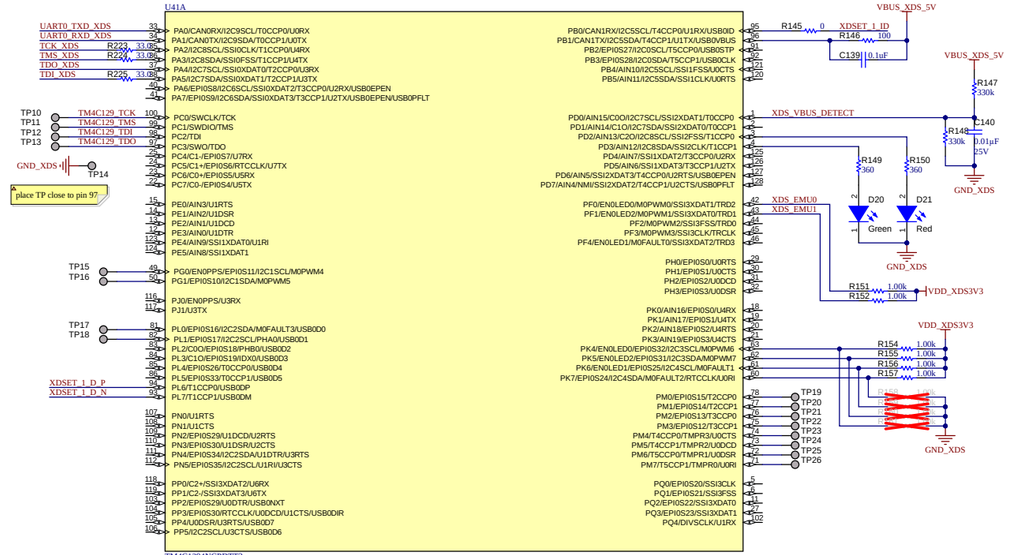
20-pin JTAG

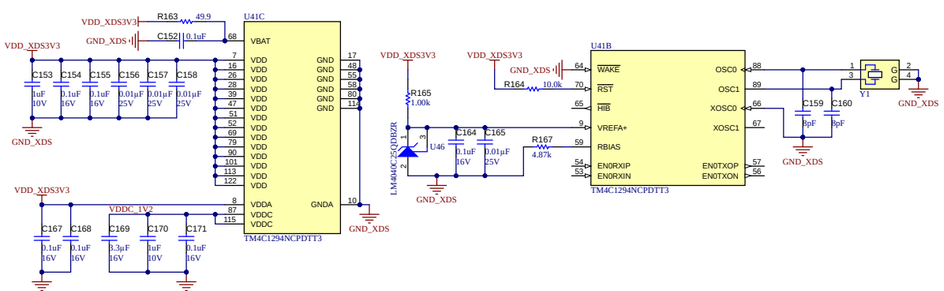


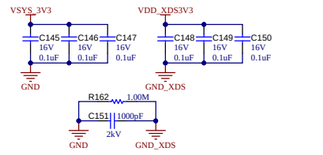
PWR isolation barrier

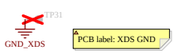


XDS110 JTAG/USB-to-UART Bridge









Orderable: ChangeMe in variant		Designed for: Public Release	Mod. Date: 1/15/2026
TID #: TIDA-010973		Project Title: 100Mbit IE Comm Module	
Number: TIDA-010973	Rev: E2	Sheet Title:	
SVN Rev:		Assembly Variant: 001	Sheet: 14 of 15
Drawn By:		File: TIDA-010973_JTAG_UART.SchDoc	Size: C
Engineer: Thomas Mauer		Contact: http://www.ti.com/support	

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FID1 FID2 FID3 FID4 FID5 FID6

MH1 MH2 MH3 MH4

MTG_NoPads MTG_NoPads MTG_NoPads MTG_NoPads

H1 1

NY PMS 440 0025 PH

H2 1

NY PMS 440 0025 PH

PCB Number: TIDA-010973
PCB Rev: E2

PCB LOGO
Texas Instruments

CE Mark

PCB LOGO
FCC disclaimer

PCB LOGO
WEEE logo

LBL1

PCB Label

THT-14-423-10
Size: 0.65" x 0.20 "

ZZ1

Label Assembly Note

This Assembly Note is for PCB labels only

Variant/Label Table	
Variant	Label Text
001	ChangeMe!
002	ChangeMe!

ZZ2

Assembly Note

These assemblies are ESD sensitive, ESD precautions shall be observed.

ZZ3

Assembly Note

These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.

ZZ4

Assembly Note

These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.

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Orderable: ChangeMe in variant	Designed for: Public Release	Mod. Date: 2/13/2026
TID #: TIDA-010973	Project Title: 100Mbit IE Comm Module	
Number: TIDA-010973 Rev: E2	Sheet Title:	
SVN Rev: 16154 [Locally Modified]	Assembly Variant: 001	Sheet: 15 of 15
Drawn By:	File: TIDA-010973_Hardware.SchDoc	Size: B
Engineer: Thomas Mauer	Contact: http://www.ti.com/support	

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