XDS110 BOARD

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TID #: N/A		Project Title: C2000 XDS110 Plug -In Board	
Number: MCU129	Rev: A	Sheet Title:	
SVN Rev: 1378		Assembly Variant: 001	Sheet: 1 of 9
Drawn By: Texas Instruments		File: MCU129A_TABLE OF CONTENTS.SchDoc	Size: B
Engineer: Gus Martinez		Contact:	

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REVISION HISTORY

VER#	DATE	DESCRIPTION	AUTHOR	REVIEWED BY	APPROVED BY
0.1	20 MAR 2024	DRAFTED FROM E1	MISTRAL DESIGN TEAM		
0.2	27 JUN 2024	UPDATED EMULATION CONNECTOR FOOTPRINT AND ADDED LED ON IO_TGT_V NET	MISTRAL DESIGN TEAM		

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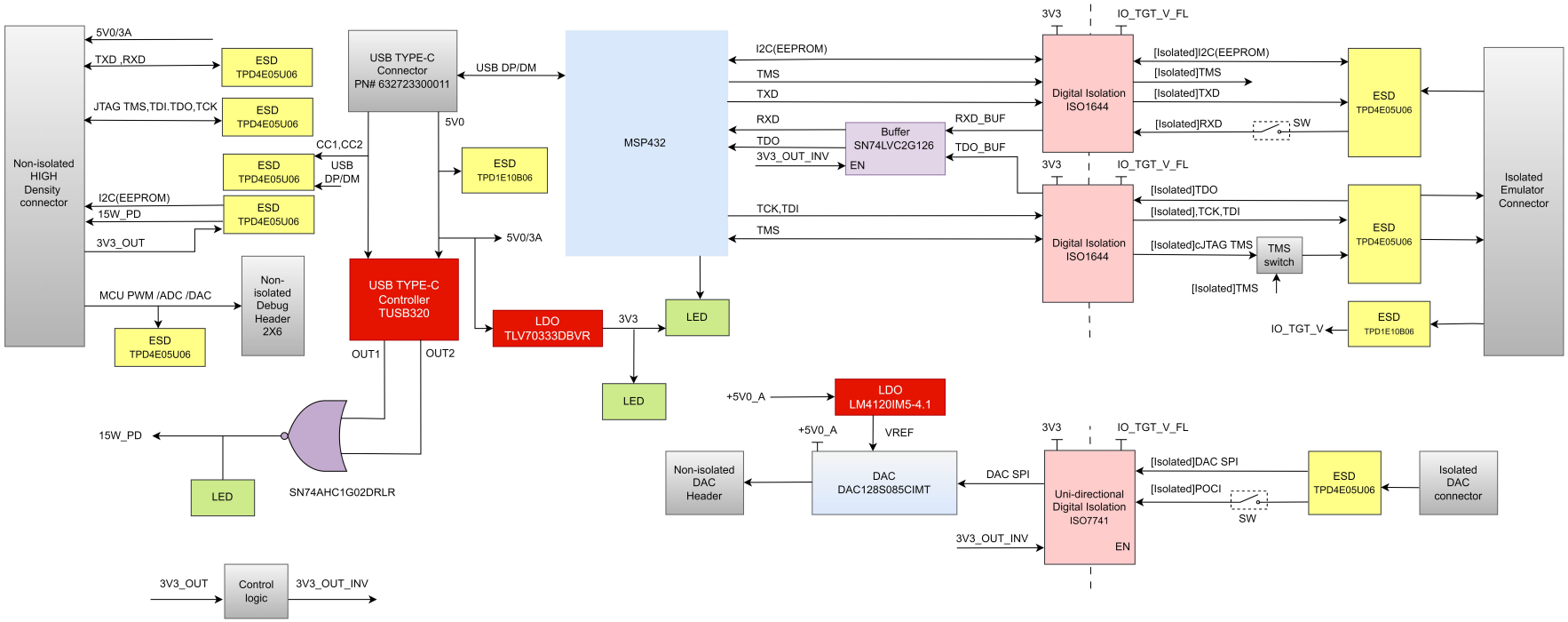
XDS110 SYSTEM BLOCK DIAGRAM



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Number: MCU129	Rev: A	Sheet Title:	
SVN Rev: 1433		Assembly Variant: 001	Sheet: 3 of 9
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Engineer: Gus Martinez		Contact:	

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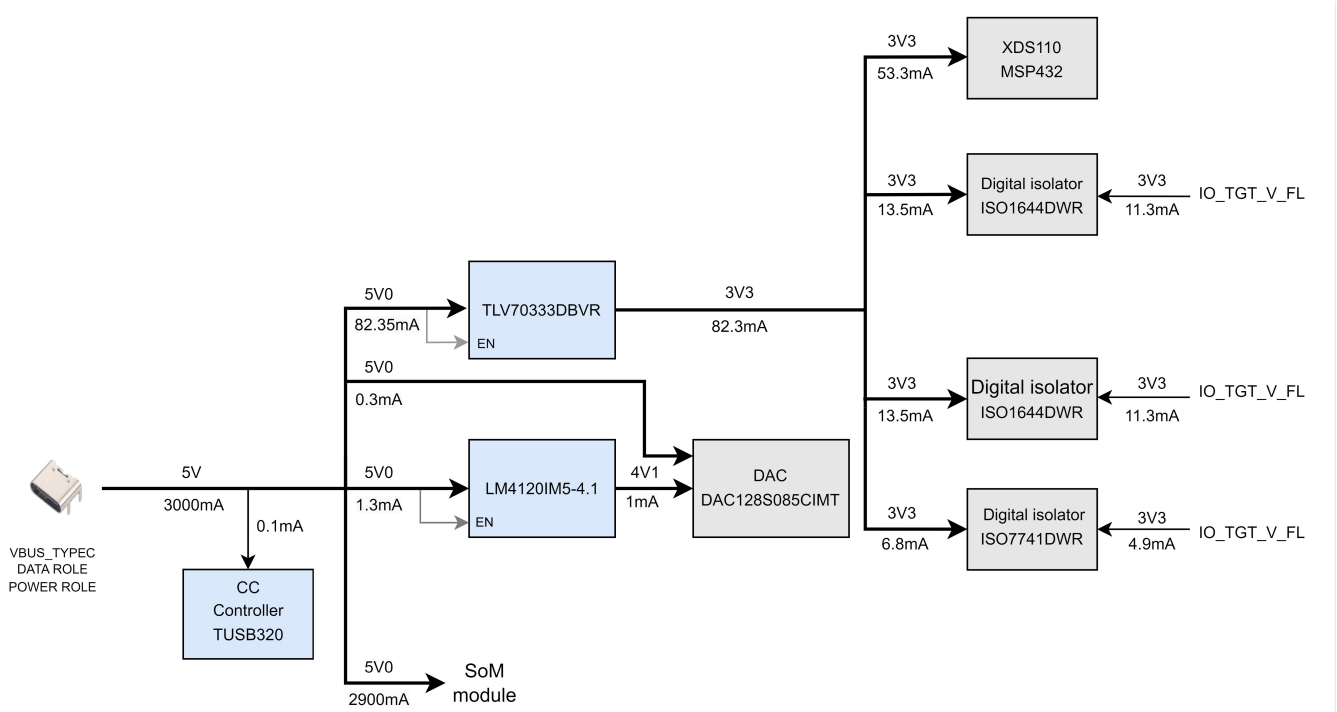
POWER ARCHITECTURE OF XDS110



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Number: MCU129	Rev: A	Sheet Title:	
SVN Rev: 1433		Assembly Variant: 001	Sheet: 4 of 9
Drawn By: Texas Instruments		File: MCU129A_POWER_ARCHITECT.SchDoc	Size: B
Engineer: Gus Martinez		Contact:	

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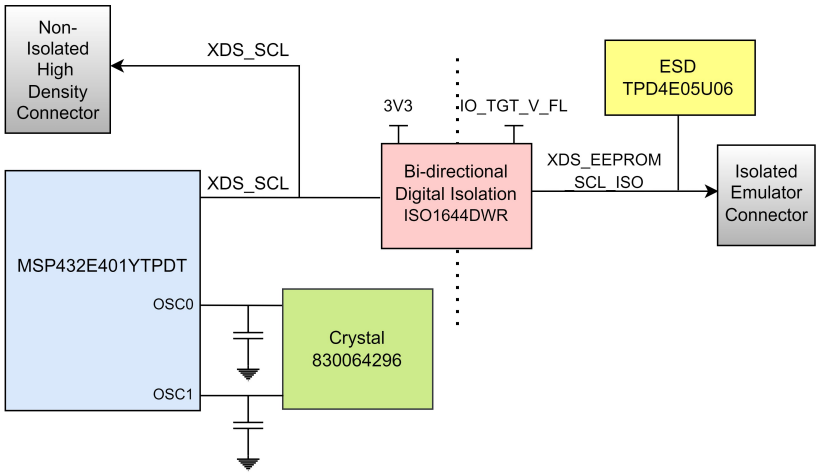
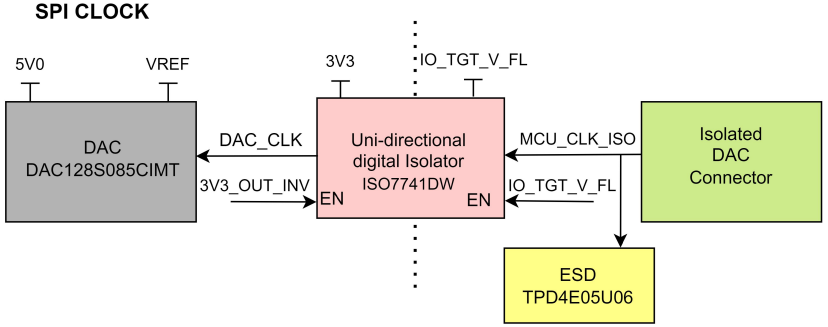
CLOCK ARCHITECTURE OF XDS110



SPI CLOCK



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Number: MCU129	Rev: A	Sheet Title:	
SVN Rev: 1433		Assembly Variant: 001	Sheet: 5 of 9
Drawn By: Texas Instruments		File: MCU129A_CLOCK_ARCHITECTURE.SchDoc	Size: B
Engineer: Gus Martinez		Contact:	

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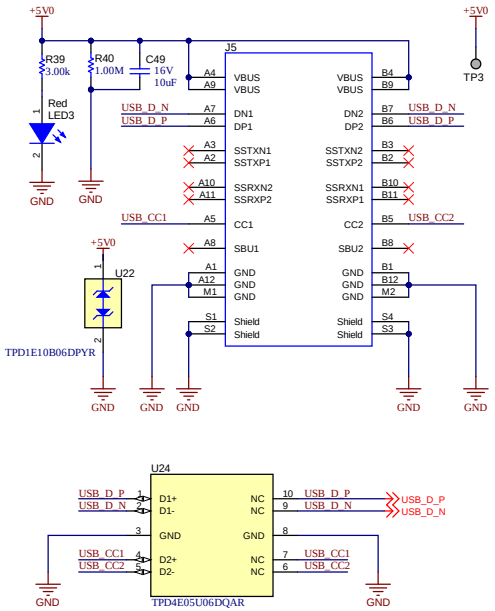
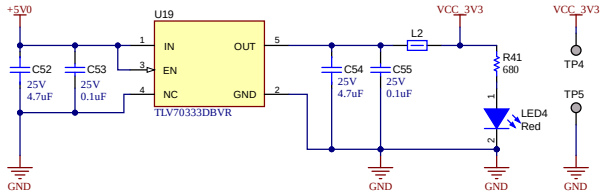
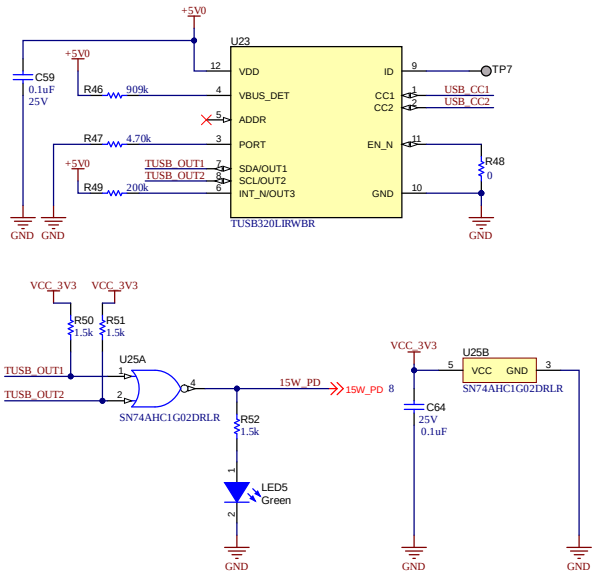
POWER SECTION



3V3 POWER SECTION

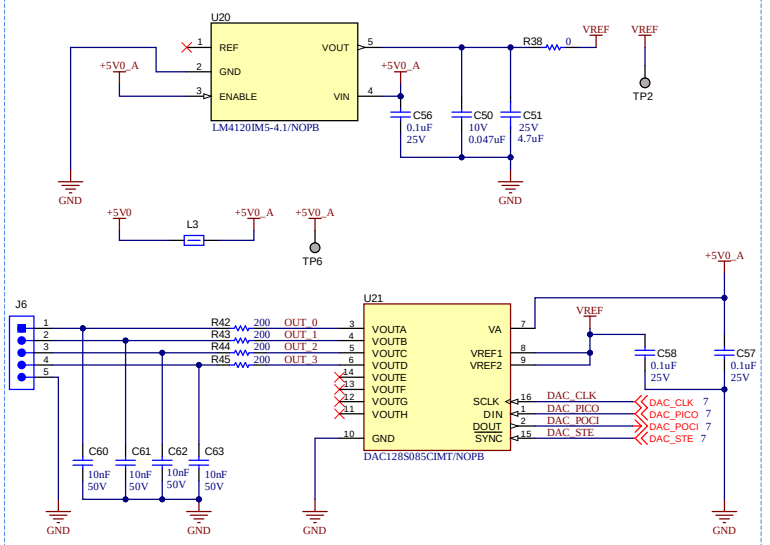


CC CONTROLLER SECTION

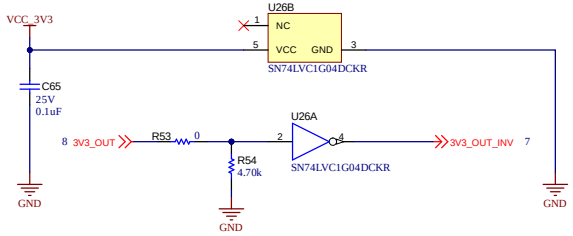


OUT1	OUT2	ADVERTISEMENT
H	H	Default Current in Unattached State
H	L	Default Current in Attached State
L	H	Medium Current (1.5 A) in Attached State
L	L	High Current (3.0 A) in Attached State

DAC SECTION



CONTROL LOGIC FOR 3V3_OUT



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Number: MCU129	Rev: A	Sheet Title:	
SVN Rev: 1378		Assembly Variant: 001	Sheet: 6 of 9
Drawn By: Texas Instruments		File: MCU129A_POWER_DAC_SECTION.SchDoc	Size: B
Engineer: Gus Martinez		Contact:	

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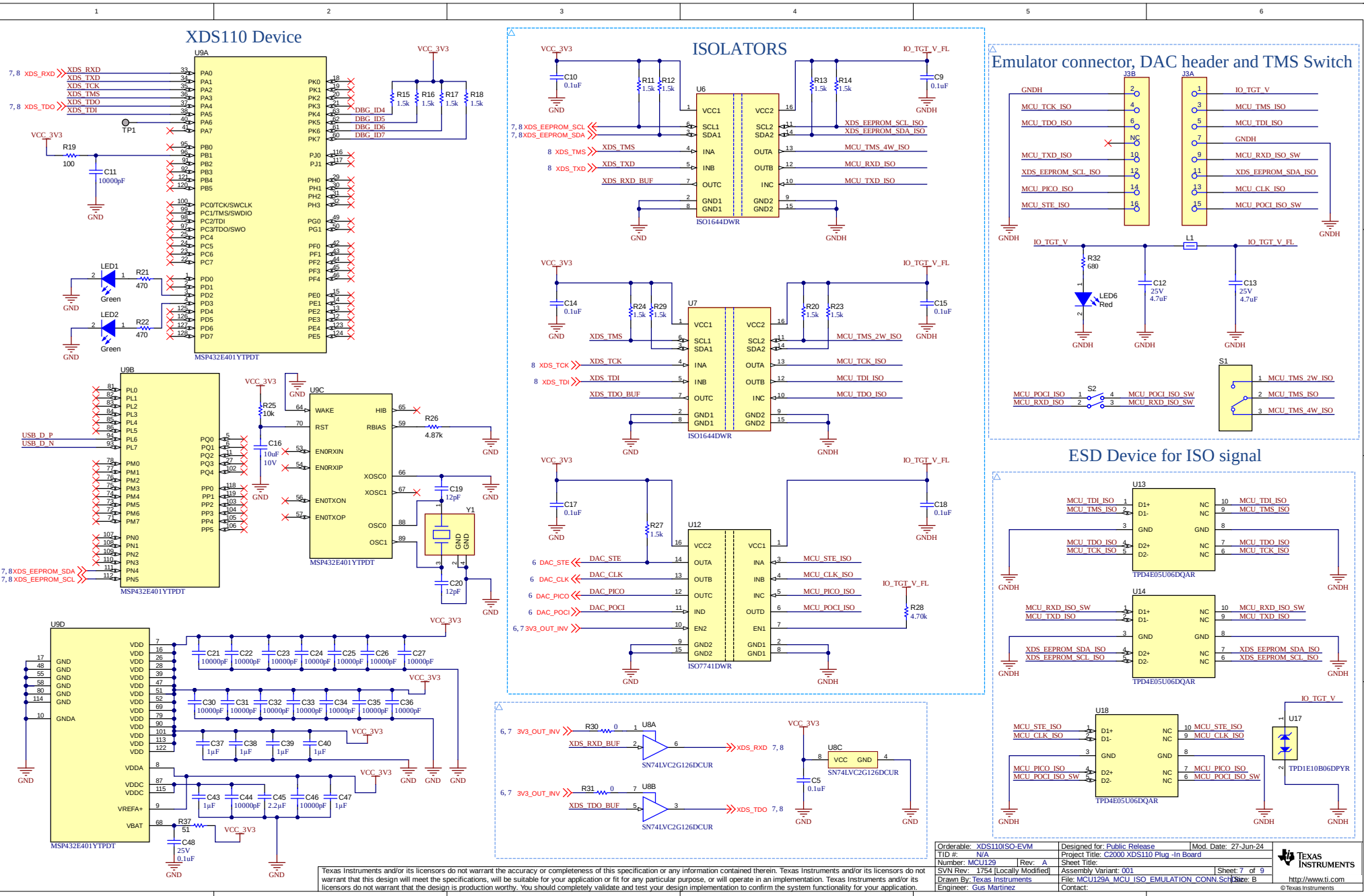
XDS110 Device
ISOLATORS
Emulator connector, DAC header and TMS Switch
ESD Device for ISO signal
MSP432E401YTPDT
ISO1644DWR
ISO7741DWR
SN74LVC2G126DCUR
TPD4E05U06DQAR
TPD1E10B06DPYR
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Orderable: XDS110ISO-EVM
Designed for: Public Release
Mod. Date: 27-Jun-24
TID #: N/A
Project Title: C2000 XDS110 Plug -In Board
Number: MCU129
Rev: A
Sheet Title:
SVN Rev: 1754 [Locally Modified]
Assembly Variant: 001
Sheet: 7 of 9
Drawn By: Texas Instruments
File: MCU129A_MCU_ISO_EMULATION_CONN.SchDoc
Size: B
Engineer: Gus Martinez
Contact:
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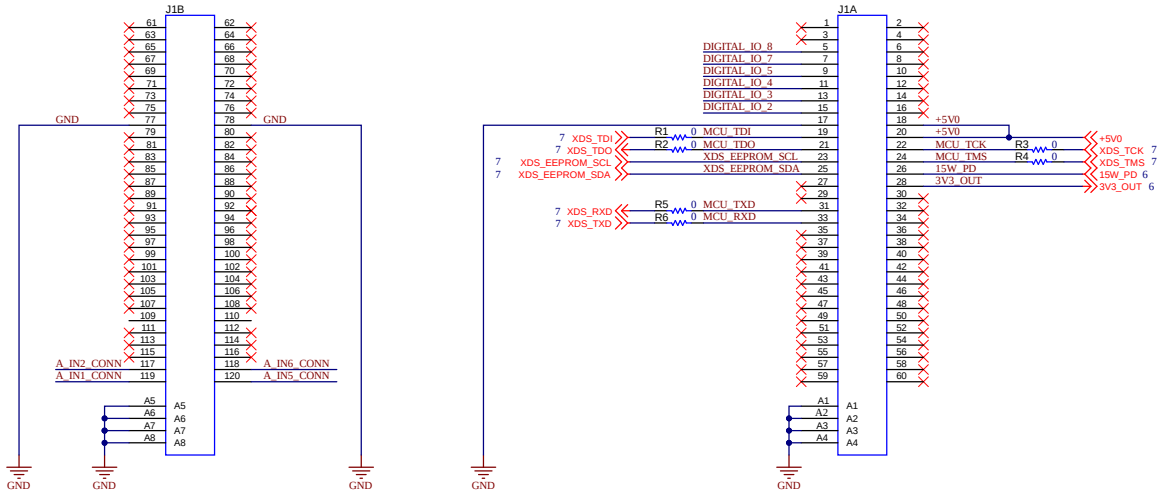
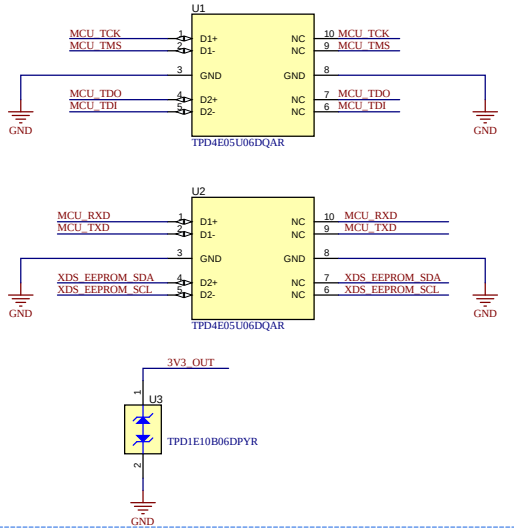
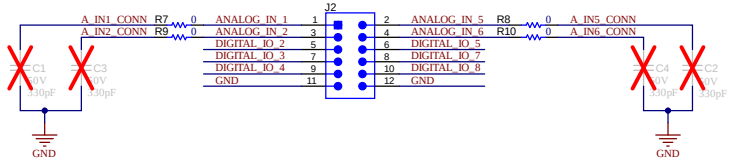
NON-ISOLATED HIGH DENSITY CONNECTOR



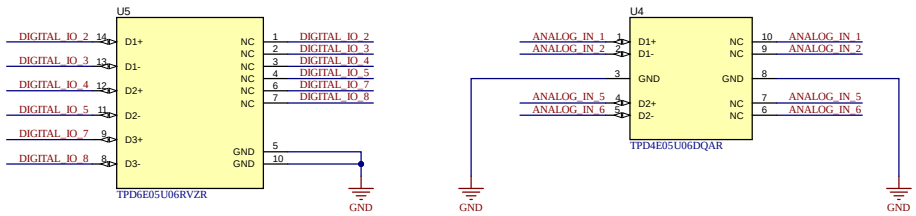
ESD DEVICE FOR NON ISO SIGNAL



NON-ISOLATED DEBUG HEADER



ESD DEVICE FOR NON ISO DEBUG HEADER SIGNAL



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Number: MCU129	Rev: A	Sheet Title:	
SVN Rev: 1754		Assembly Variant: 001	Sheet: 8 of 9
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FID1 FID2 FID3 FID4 FID5 FID6

PCB Number: MCU129
PCB Rev: A

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

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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SVN Rev: 1754		Assembly Variant: 001	Sheet: 9 of 9
Drawn By: Texas Instruments		File: MCU129A_EVM_Hardware.SchDoc	Size: B
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