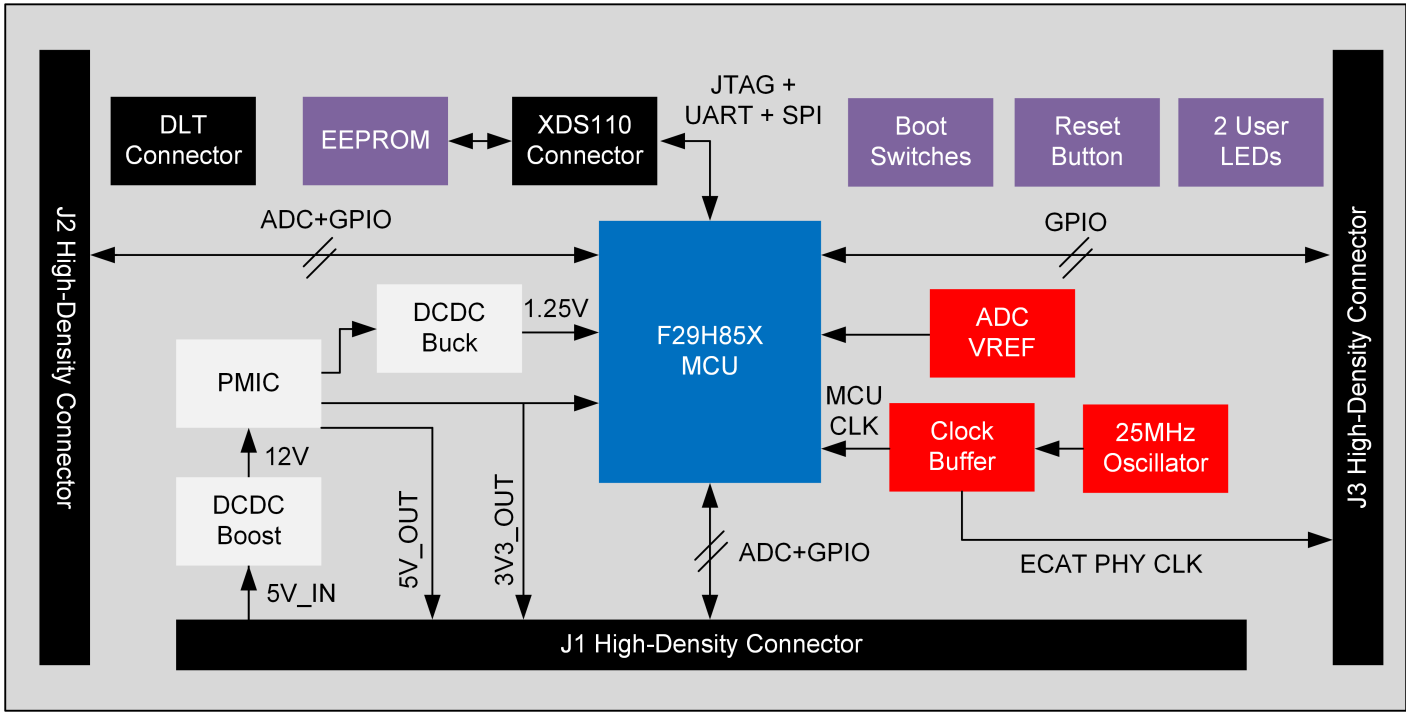
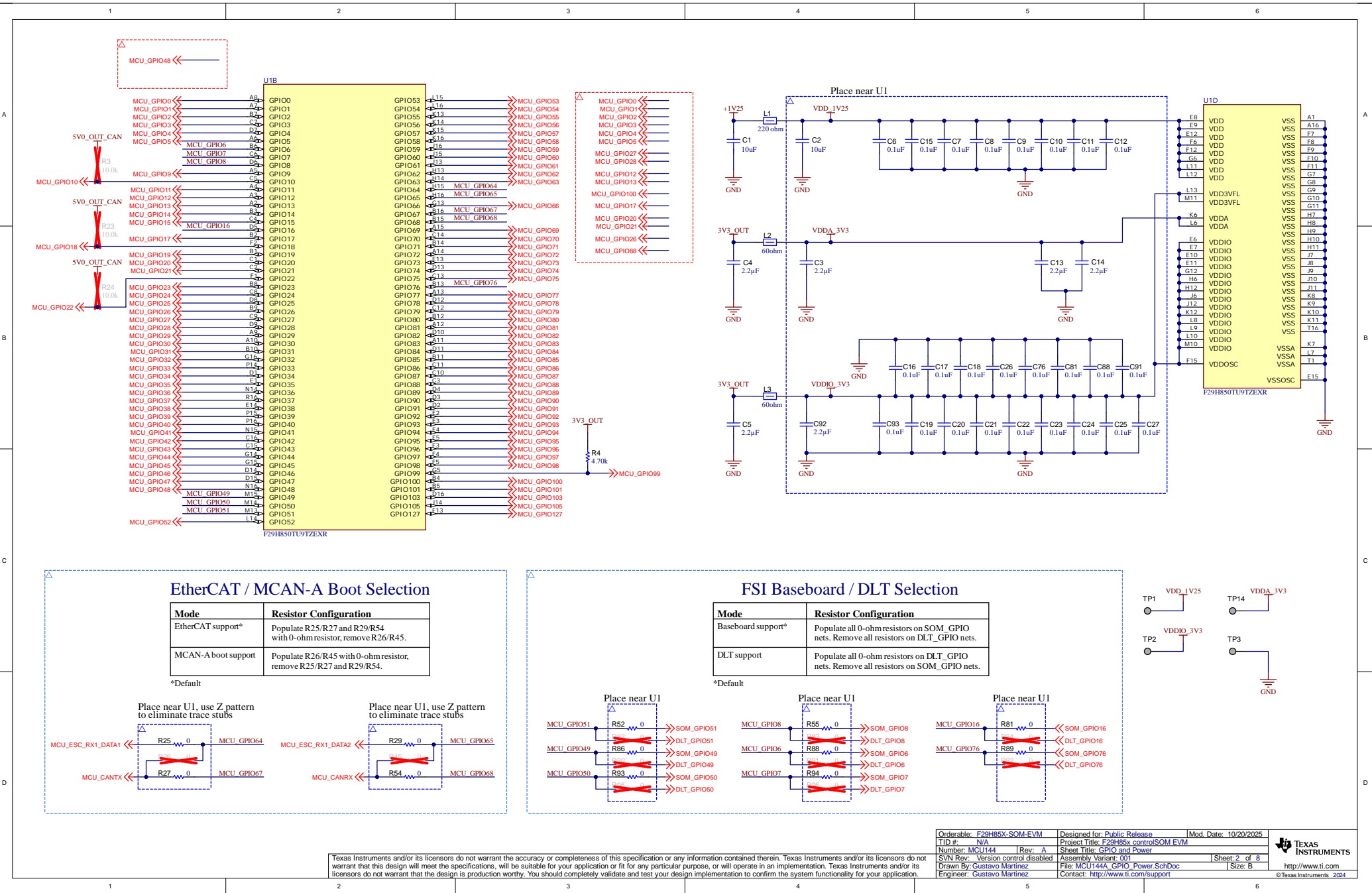


Revision History				
Rev	ECN #	Approved Date	Approved by	Notes
E1	N/A	N/A	GM	Original engineering release.
A	N/A	Oct. 17, 2024	GM	- Changed default boot mode to 11b - Changed C97 part number - Changed internal VREF connection on S3/S4 - Changed FSI connections on J5 - Removed tracking feature from U7 - Added soft start capacitor to U7 - Changed filtering scheme for ADC external reference
A	N/A	Oct. 20, 2025	GM	Updated notes in SOM power schematic; no functional change to EVM.



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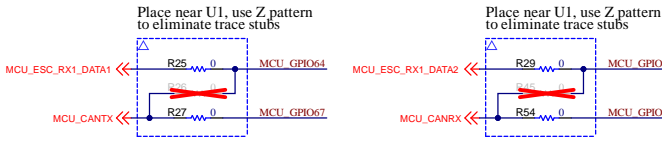
Orderable: F29H85X-SOM-EVM	Designed for: Public Release	Mod. Date: 10/20/2025
TID #: N/A	Project Title: F29H85X controlSOM EVM	
Number: MCU144	Rev: A	Sheet: 1 of 8
SVN Rev: Version control disabled	Assembly Variant: 001	Size: B
Drawn By: Gustavo Martinez	File: MCU144A_Coversheet.SchDoc	http://www.ti.com
Engineer: Gustavo Martinez	Contact: http://www.ti.com/support	©Texas Instruments 2024



EtherCAT / MCAN-A Boot Selection

Mode	Resistor Configuration
EtherCAT support*	Populate R25/R27 and R29/R54 with 0-ohm resistor, remove R26/R45.
MCAN-A boot support	Populate R26/R45 with 0-ohm resistor, remove R25/R27 and R29/R54.

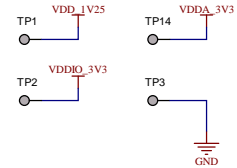
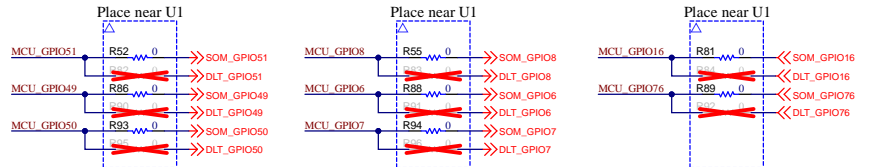
*Default



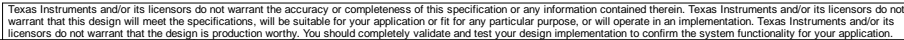
FSI Baseboard / DLT Selection

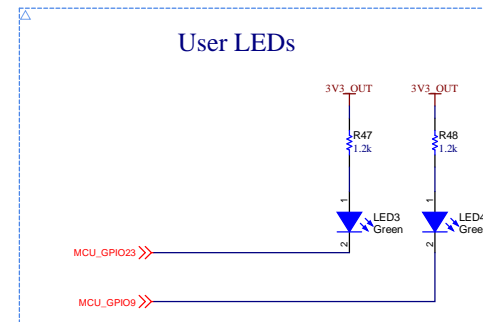
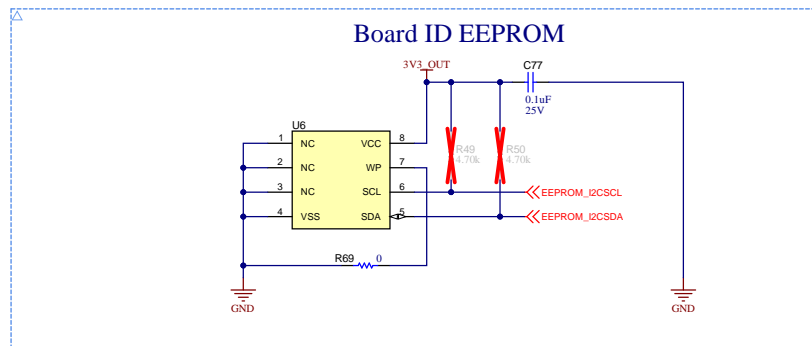
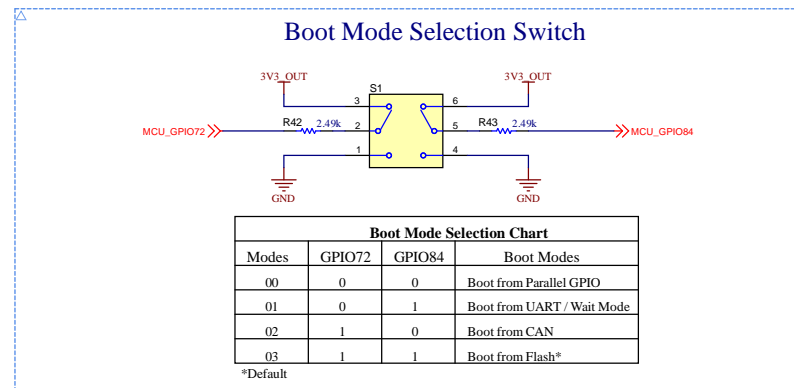
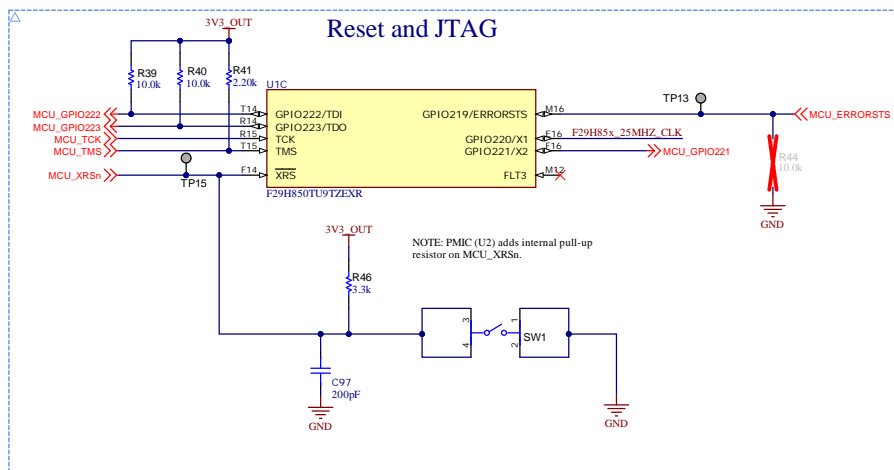
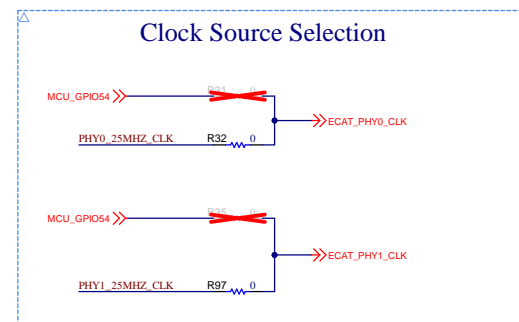
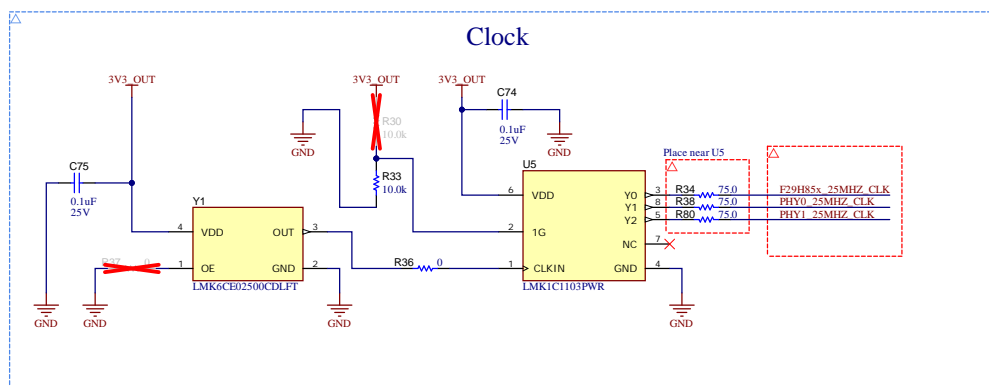
Mode	Resistor Configuration
Baseboard support*	Populate all 0-ohm resistors on SOM_GPIO nets. Remove all resistors on DLT_GPIO nets.
DLT support	Populate all 0-ohm resistors on DLT_GPIO nets. Remove all resistors on SOM_GPIO nets.

*Default




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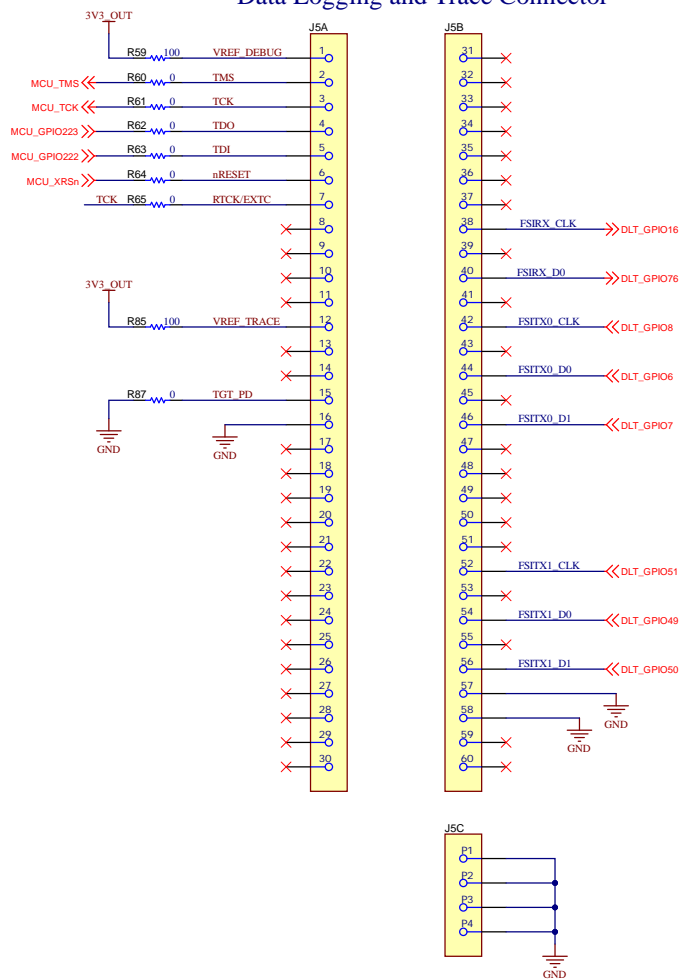




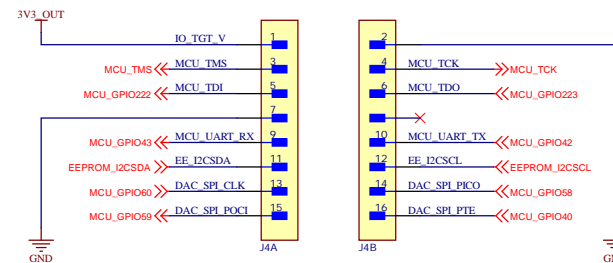
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Orderable: F29H85X-SOM-EVM	Designed for: Public Release	Mod. Date: 10/20/2025	 TEXAS INSTRUMENTS
TID #: N/A	Project Title: F29H85X-controlSOM-EVM		
Number: MCU144	Rev: A		
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 4 of 8	
Drawn By: Gustavo Martinez	File: MCU144A.Clk_Resst_Boot_SchDoc	Size: B	
Engineer: Gustavo Martinez	Contact: http://www.ti.com /support		
			http://www.ti.com © Texas Instruments 2024

Data Logging and Trace Connector



Emulator Connector



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Orderable: F29H85X-SOM-EVM	Designed for: Public Release	Mod. Date: 10/23/2024
TID #: N/A	Project Title: F29H85X controlSOM EVM	
Number: MCU144	Rev: A	Sheet Title: Emulation Connectors
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 7 of 8
Drawn By: Gustavo Martinez	File: MCU144A_Emulation Connectors.SchDoc	Size: B
Engineer: Gustavo Martinez	Contact: http://www.ti.com/support	http://www.ti.com



PCB Number: MCU144
PCB Rev: A

PCB
LOGO
Texas Instruments

PCB
LOGO
FCC disclaimer

PCB
LOGO
WEEE logo



MTG_NoPads



MTG_NoPads



MTG_NoPads



MTG_NoPads

Variant/Label Table	
Variant	Variant Description
001	25-MHz clock disabled; U2 NRST read-back disabled; see user guide for details.
002	25-MHz clock disabled; see user guide for details.
003	Full-feature

ZZ1

Label Assembly Note

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

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

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

Orderable: F29H85X-SOM-EVM		Designed for: Public Release		Mod. Date: 12/31/2024		
TID #: N/A		Project Title: F29H85X-core-iSOM EVM		 TEXAS INSTRUMENTS		
Number: MCU144		Rev: A				
SVN Rev: Version control disabled		Assembly Name: 001				
Drawn By: Gustavo Martinez		File: MCU144A EVM Hardware_SchDoc		Size: B		
Engineer: Gustavo Martinez		Contact: http://www.ti.com/support				http://www.ti.com © Texas Instruments 2024

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