



Product Change Notification / SYST-16PHPL764

Date:

17-Apr-2024

Product Category:

General Purpose Fpgas

PCN Type:

Document Change

Notification Subject:

Data Sheet - PolarFire® FPGA Datasheet

Affected CPNs:

[SYST-16PHPL764_Affected_CPN_04172024.pdf](#)

[SYST-16PHPL764_Affected_CPN_04172024.csv](#)

Notification Text:

SYST-16PHPL764

Microchip has released a new Datasheet for the PolarFire® FPGA Datasheet of devices. If you are using one of these devices please read the document located at [PolarFire® FPGA Datasheet](#).

Notification Status: Final

Description of Change:

- Added the MPF050T part number status to production.
- Added two notes to Table 4-3 to explain how weak pullup and weak pulldown resistors should be calculated.
- Corrected Note 6 of Table 4-4. The maximum time allowed was listed as 300 μ s and should be 300 ns.
- Added HSIO clock skew with bridging for MPF050T device in Table 5-17.
- Added PLL output jitter specification for FOUT slower than 1.5 MHz in Table 5-18. Also clarified Note 5 and 6.
- Added footnote to Table 5-106.
- Updated the SPI Timing section for clarification. No changes to silicon have occurred. See 5.10.2. SPI Switching Characteristics.
- Clarified Note 1 and condition in Table 5-106.
- Changed "CDR PPM tolerance" to "CDR frequency tolerance" for better clarity in 5.4.5. Receiver Performance.
- Updated VDDI3 power-up requirements in section 5.9. Power-Up to Functional Timing and 5.9.3.2. I/O-Related Supplies.
- Updated 5.6.6. Zeroization Time and 5.8.7. User Voltage Detector Characteristics sections as per PCN.
- Updated Table 5-37.
- Updated 5.2.4. RC Oscillators.

- Corrected item in Table 5-7. Fabric clock maximum frequency for LPDDR3 on -STD speed grade devices was listed as 133 MHz and should be 100 MHz.
- Updated Table 5-107 to support the full military range.
- Authentication Service IDs were swapped. Table 5-81 was updated.
- Corrected Table 3 for military grade devices to lead and tin.
- Redirected the Device Offering list to a separate document entitled PolarFire® FPGA Product Overview.

Impacts to Data Sheet: See above details.

Change Implementation Status: Complete

Date Document Changes Effective: 17 Apr 2024

NOTE: Please be advised that this is a change to the document only the product has not been changed.

Markings to Distinguish Revised from Unrevised Devices: N/A

Attachments:

[PolarFire® FPGA Datasheet](#)

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Affected Catalog Part Numbers (CPN)

MPF300T-1FCVG484T2
MPF300T-FCVG484T2
MPF300T-1FCSG536T2
MPF300T-FCSG536T2
MPF300TS-FC484M
MPF300T-FCG484X547
MPF300TS-FCV484M
MPF300TS-FC784M
MPF300TS-FCS536M
MPF300T-1FCG484E
MPF300T-1FCG484I
MPF300T-FCG484EX52
MPF300T-FCG484E
MPF300T-FCG484I
MPF300TL-FCG484E
MPF300TL-FCG484I
MPF300TLS-FCG484I
MPF300TS-1FCG484I
MPF300TS-FCG484I
MPF300T-1FCG484IX548
MPF300T-1FCG484IS0322
MPF300T-1FCVG484E
MPF300T-1FCVG484I
MPF300T-FCVG484E
MPF300T-FCVG484I
MPF300TL-FCVG484E
MPF300TL-FCVG484I
MPF300TLS-FCVG484I
MPF300TS-1FCVG484I
MPF300TS-FCVG484I
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MPF300T-FCG784ES0317
MPF300T-FCG784ES0323
MPF300T-1FCG784NE
MPF300T-1FCG784NI
MPF300T-FCG784NE

MPF300T-FCG784NI
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MPF300TS-FCG784NI
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MPF300T-1FCG1152E
MPF300T-1FCG1152I
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MPF300TS-1FCG1152I
MPF300TS-FCG1152I
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MPF300T-FCG1152ES0324
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MPF300TL-FCSG536I
MPF300TLS-FCSG536I
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MPF300TS-FCSG536I
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MPF500TS-FC1152M
MPF500TS-FC1152MX3
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MPF500T-FCG784I
MPF500TL-FCG784E
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MPF500TLS-FCG784I
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MPF100T-1FCVG484T2
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