



17052470 C8051F58x and C8051F59x Datasheet update bulletin

Bulletin Issue Date: 5/24/2017

Effective Date: 5/24/2017

Description of Change

Silicon Labs is pleased to announce the release of version 1.4 of the C8051F58x/F59x datasheet. These changes are considered minor and do not affect fit, form, or function.

The changes made are as follows:

- Updated the wording in section 13 to clarify that the device has four Special Function Register pages (SFR pages).
- Updated the procedure in Reprogramming the VDD Monitor High Threshold on page 138 to ensure a non-calibrated internal regulator output does not reset the chip. The added steps involve disabling the VDD monitor, waiting for it to stabilize, and then re-enabling it.
- Adjusted the wording in Power-Fail Reset/VDD Monitor on page 154 to clarify the delays needed when enabling or adjusting the levels of the VDD monitor.
- Added a spec in table 5.4 for the VDD monitor settling time.
- Adjusted the wording in 23.3.5. SCL High (SMBus Free) Timeout, to clarify a free bus condition will occur and a START will be generated if the SMBus is waiting to generate a master START because another master sent a START on the bus without a STOP.
- Removed a redundant paragraph and fixed an incorrect equation in 23.4.1. SMBus Configuration Register.
- Added detail to the SMBFTE bit function to explain the SMBus behavior in the SFR Definition 23.1. SNB0CF SMBUS Clock/Configuration.
- Added Table 5.14, SMBus Peripheral Timing Performance (Master Mode) on page 54, Table 5.15, SMBus Peripheral Timing Formulas (Master Mode), on page 55, and Figure 5.2 on page 55 to Electrical Characteristics on page 42. This details the timing requirements for the SMBus peripheral in master mode like hole time, settling time, frequency, low and higher periods, and more.

Reason for Change

Release of version 1.4 of the C8051F58x/F59x datasheet

Product Identification

Existing Part #

C8051F580-AM
C8051F580-AMR
C8051F580-AQ
C8051F580-AQR
C8051F580-IM
C8051F580-IMR
C8051F580-IQ
C8051F580-IQR
C8051F581-AM
C8051F581-AMR
C8051F581-AQ
C8051F581-AQR
C8051F581-IM
C8051F581-IMR
C8051F581-IQ
C8051F581-IQR
C8051F582-AM
C8051F582-AMR
C8051F582-AQ
C8051F582-AQR
C8051F582-IM
C8051F582-IMR

C8051F582-IQ
C8051F582-IQR
C8051F583-AM
C8051F583-AMR
C8051F583-AQ
C8051F583-AQR
C8051F583-IM
C8051F583-IMR
C8051F583-IQ
C8051F583-IQR
C8051F584-AM
C8051F584-AMR
C8051F584-AQ
C8051F584-AQR
C8051F584-IM
C8051F584-IMR
C8051F584-IQ
C8051F584-IQR
C8051F585-AM
C8051F585-AMR
C8051F585-AQ
C8051F585-AQR
C8051F585-GQ
C8051F585-GQR
C8051F585-IM
C8051F585-IMR
C8051F585-IQ
C8051F585-IQR
C8051F586-AM
C8051F586-AMR
C8051F586-AQ
C8051F586-AQR
C8051F586-IM
C8051F586-IMR
C8051F586-IQ
C8051F586-IQR
C8051F587-AM
C8051F587-AMR
C8051F587-AQ
C8051F587-AQR
C8051F587-IM
C8051F587-IMR
C8051F587-IQ
C8051F587-IQR
C8051F588-AM
C8051F588-AMR
C8051F588-IM
C8051F588-IMR
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