TMS470/570 Platform F035a
Flash API

Errata

Literature Number: SPNZ185A
November 2011–Revised January 2014

Contents

List of Tables

TMS470/570 Platform F035a Flash API

This document describes the known exceptions to the functional specifications for the software.

1 All Errata Listed With Software Version Numbers

Table 1. Overview

Advisory ID	v01.05.00	v01.06.00	v01.08.00	v01.09.00
SDOCM00084916	X	-	-	-
SDOCM00104972	X	X	-	-
SDOCM00105927	-	X	X	-

2 Revision History

This software errata revision history highlights the technical changes made from the previous to the current revision.

Table 2. Revision History

Advisory Changes in Advisory List	Advisory ID
Added advisory(s)	SDOCM00105927
Removed advisory(s)	None
Modified advisory(s)	None
Other	None

3 Known Design Exceptions to Function Specifications

Table 3. Known Design Exceptions to Function Specifications

Title **Page**

SDOCM00084916 *Fapi_HardwareCalculateECC() may not calculate correct ECC on Cortex-R4 Processors in non Strongly Ordered Flash Memory*

Severity	Medium
Expected Behavior	To calculate the correct ECC for the given data.
Issue	On Cortex-R4 in non strongly order Flash memory, the incorrect ECC may be returned.
Conditions	Non Strongly Ordered Flash memory will cause this issue.
Implications	The incorrect ECC may be calculated.
Workaround(s)	None

SDOCM00104972 *Flash_Blank_B() does not enter read margin mode properly*

Severity	Urgent
Expected Behavior	To perform a blank check on Flash memory.
Issue	The blank check routine (and any other API function that uses read margin mode) unnecessarily enters SWIF (software interface) mode.
Conditions	When the flash wrapper peripheral registers are mapped as "device" memory the first access of blank check will read from the wrong location.
Implications	Blank check may fail when the sector of flash was really blank. Sometimes this gives a data abort.
Workaround(s)	None

SDOCM00105927 *Prog_Data_B() does not return correct value in stat3 on faillure*

Severity	Minor
Expected Behavior	On failure, return the value of the FMSTAT register in stat3
Issue	The value presented on failure in stat3 is being overwritten with pulse count information
Conditions	Occurs when ever a programming failure occurs.
Implications	Data in stat3 should not be used to diagnose a Flash programming failure.
Workaround(s)	Read the FMSTAT register directly.

IMPORTANT NOTICE

Texas Instruments Incorporated and its subsidiaries (TI) reserve the right to make corrections, enhancements, improvements and other changes to its semiconductor products and services per JESD46, latest issue, and to discontinue any product or service per JESD48, latest issue. Buyers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All semiconductor products (also referred to herein as “components”) are sold subject to TI’s terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its components to the specifications applicable at the time of sale, in accordance with the warranty in TI’s terms and conditions of sale of semiconductor products. Testing and other quality control techniques are used to the extent TI deems necessary to support this warranty. Except where mandated by applicable law, testing of all parameters of each component is not necessarily performed.

TI assumes no liability for applications assistance or the design of Buyers’ products. Buyers are responsible for their products and applications using TI components. To minimize the risks associated with Buyers’ products and applications, Buyers should provide adequate design and operating safeguards.

TI does not warrant or represent that any license, either express or implied, is granted under any patent right, copyright, mask work right, or other intellectual property right relating to any combination, machine, or process in which TI components or services are used. Information published by TI regarding third-party products or services does not constitute a license to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

Reproduction of significant portions of TI information in TI data books or data sheets is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Resale of TI components or services with statements different from or beyond the parameters stated by TI for that component or service voids all express and any implied warranties for the associated TI component or service and is an unfair and deceptive business practice. TI is not responsible or liable for any such statements.

Buyer acknowledges and agrees that it is solely responsible for compliance with all legal, regulatory and safety-related requirements concerning its products, and any use of TI components in its applications, notwithstanding any applications-related information or support that may be provided by TI. Buyer represents and agrees that it has all the necessary expertise to create and implement safeguards which anticipate dangerous consequences of failures, monitor failures and their consequences, lessen the likelihood of failures that might cause harm and take appropriate remedial actions. Buyer will fully indemnify TI and its representatives against any damages arising out of the use of any TI components in safety-critical applications.

In some cases, TI components may be promoted specifically to facilitate safety-related applications. With such components, TI’s goal is to help enable customers to design and create their own end-product solutions that meet applicable functional safety standards and requirements. Nonetheless, such components are subject to these terms.

No TI components are authorized for use in FDA Class III (or similar life-critical medical equipment) unless authorized officers of the parties have executed a special agreement specifically governing such use.

Only those TI components which TI has specifically designated as military grade or “enhanced plastic” are designed and intended for use in military/aerospace applications or environments. Buyer acknowledges and agrees that any military or aerospace use of TI components which have ***not*** been so designated is solely at the Buyer's risk, and that Buyer is solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI has specifically designated certain components as meeting ISO/TS16949 requirements, mainly for automotive use. In any case of use of non-designated products, TI will not be responsible for any failure to meet ISO/TS16949.

Products		**Applications**	
Audio	www.ti.com/audio	Automotive and Transportation	www.ti.com/automotive
Amplifiers	amplifier.ti.com	Communications and Telecom	www.ti.com/communications
Data Converters	dataconverter.ti.com	Computers and Peripherals	www.ti.com/computers
DLP® Products	www.dlp.com	Consumer Electronics	www.ti.com/consumer-apps
DSP	dsp.ti.com	Energy and Lighting	www.ti.com/energy
Clocks and Timers	www.ti.com/clocks	Industrial	www.ti.com/industrial
Interface	interface.ti.com	Medical	www.ti.com/medical
Logic	logic.ti.com	Security	www.ti.com/security
Power Mgmt	power.ti.com	Space, Avionics and Defense	www.ti.com/space-avionics-defense
Microcontrollers	microcontroller.ti.com	Video and Imaging	www.ti.com/video
RFID	www.ti-rfid.com		
OMAP Applications Processors	www.ti.com/omap	**TI E2E Community**	e2e.ti.com
Wireless Connectivity	www.ti.com/wirelessconnectivity		

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265