THIS SPEC IS OBSOLETE

Spec No: 002-05034

Spec Title: DATASHEET ERRATA FOR S6E2D5 SERIES
                32-BIT ARM (R) CORTEX (R)-M4F BASED
                MICROCONTROLLER

Replaced by: NONE

November 29, 2016

Datasheet Errata for S6E2D5 Series 32-bit ARM® Cortex®-M4F based Microcontroller

This document describes the errata for the S6E2D5 Series 32-bit ARM® Cortex®-M4F based Microcontroller datasheet. Compare this document to the device's data sheet for a complete functional description.

Contact your local Cypress Sales Representative, if you have questions.

Part Numbers Affected

Part Number
S6E2D5 Series

Page	Item	Description
		Original document code: DS709-00021-1v0-E
		Rev. 1.0 June 25, 2015
64	9. Handling Devices	"Sub Crystal Oscillator" should be added as indicated by the shading below. ■Surface mount type 　　　Size:　　　　　　　More than 3.2 mm × 1.5 mm 　　　Load capacitance:　　Approximately 6 pF to 7 pF When the Standard setting (CCS/CCB=11001110) 　　　Load capacitance:　　Approximately 4 pF to 7 pF When the low power setting (CCS/CCB=00000100) ■Lead type 　　　Load capacitance:　　Approximately 6 pF to 7 pF When the Standard setting (CCS/CCB=11001110) 　　　Load capacitance:　　Approximately 4 pF to 7 pF When the low power setting (CCS/CCB=00000100)

Page	Item	Description
92	14.3.1 Current Rating	Table 14-10 should be added as indicated by the shading below.

Table 14-10 Typical and Maximum Current Consumption in Deep Standby Stop Mode, Deep Standby RTC Mode and VBAT

Parameter	Symbol	Pin Name	Conditions	Frequency (MHz)	Value Typ	Max	Unit	Remarks
Power supply current	ICCVBAT	VBAT	RTC stop	-	0.009	0.032	μA	*3, *4, *5 T_A=+25°C
					-	0.994	μA	*3, *4, *5 T_A=+85°C
					-	1.491	μA	*3, *4, *5 T_A=+105°C
			RTC *6 operation		1.0	1.636	μA	*3, *4 T_A=+25°C
					-	2.828	μA	*3, *4 T_A=+85°C
					-	4.242	μA	*3, *4 T_A=+105°C
			RTC *7 operation		0.7	1.153	μA	*3, *4 T_A=+25°C
					-	2.277	μA	*3, *4 T_A=+85°C
					-	3.416	μA	*3, *4 T_A=+105°C

*1: V_{CC}=3.3 V
*2: V_{CC}=3.6 V
*3: When all ports are fixed.
*4: When LVD is OFF
*5: When sub oscillation is OFF
*6: When using the crystal oscillator of 32 kHz (including the current consumption of the oscillation circuit)
　　When the Standard setting (CCS/CCB=11001110)
*7: When using the crystal oscillator of 32 kHz (including the current consumption of the oscillation circuit)
　　When the low power setting (CCS/CCB=00000100)

Page	Item	Description
176	15. Ordering Information	Ordering Information should be corrected as indicated by the shading below.

(Error)

Part Number	Package
S6E2D55G0AGV20000	Plastic・LQFP (0.5 mm pitch), 120 pin (FPT-120P-M21)
S6E2D55GJAMV20000	
S6E2D55J0AGV20000	Plastic・LQFP (0.5 mm pitch), 176 pin (FPT-176P-M07)
S6E2D55G0AGB30000	Plastic・PFBGA (0.5 mm pitch), 161 pin (FDJ161)
S6E2D55G0AGZ20000	Plastic・Ex-LQFP (0.5 mm pitch), 120 pin (LEM120)

(Correct)

Part Number	Package
S6E2D55G0AGV20000	Plastic・LQFP (0.5 mm pitch), 120 pin (FPT-120P-M21)
S6E2D55GJAMV20000	
S6E2D55J0AGV20000	Plastic・LQFP (0.5 mm pitch), 176 pin (FPT-176P-M07)
S6E2D55G0AGB30000	Plastic・PFBGA (0.5 mm pitch), 161 pin (FDJ161)
S6E2D55G0AGE20000	Plastic・Ex-LQFP (0.5 mm pitch), 120 pin (LEM120)

Rev. 2.0 September 16, 2015

Page	Item	Description
11	2. Features	Note should be added as indicated by the shading below. (Error) GDC Unit Controller for external graphics display Accelerator for 2D block image transfer (blit) operations Embedded SRAM video memory High-Speed Quad SPI (Serial Peripheral Interface for external memory extensions) SDRAM interface for external memory extensions HBI (Hyper Bus Interface) interface for external memory extensions Maximum core system clock frequency : 160 MHz (Correct) GDC Unit Controller for external graphics display Accelerator for 2D block image transfer (blit) operations Embedded SRAM video memory High-Speed Quad SPI (Serial Peripheral Interface for external memory extensions) SDRAM interface for external memory extensions HBI (Hyper Bus Interface) interface for external memory extensions Maximum core system clock frequency : 160 MHz Note: *User can leverage the internal VRAM and external HyperRAM as a graphics memory allowed to* be written *by GDC.*
15	4. Packages	"Packages" should be corrected as indicated by the shading below. (Error)

(Error)

Product Name Package	S6E2D55G0A	S6E2D55J0A	S6E2D55GJA
LQFP: FPT-120P-M21 (0.5 mm pitch)	○	-	○
LQFP: FPT-176P-M07 (0.5 mm pitch)	-	○	-
PFBGA: FDJ161 (0.5 mm pitch)	○	-	-
Ex_LQFP(TEQFP): LEM120 (0.5 mm pitch)	○		

○: Supported

(Correct)

Product Name Package	S6E2D55G0A	S6E2D55J0A	S6E2D55GJA
LQFP: FPT-120P-M21 (0.5 mm pitch)	○	-	○
LQFP: FPT-176P-M07 (0.5 mm pitch)	-	○	-
FBGA: FDJ161 (0.5 mm pitch)	○	-	-
Ex_LQFP(TEQFP): LEM120 (0.5 mm pitch)	□	-	-

○: Supported □: In development

Page	Item	Description
16, 18	5. Pin Assignment	Signal name should be corrected as below. (Error) GE_SPCSX_0 (Correct) GE_SPCSX0 (Error) GE_HBCSX_0 (Correct) GE_HBCSX0 (Error) GE_HBCSX_1 (Correct) GE_HBCSX1
21, 23, 48	6. Pin Descriptions	Signal name should be corrected as below. (Error) GE_SPCSX_0 (Correct) GE_SPCSX0 (Error) GE_HBCSX_0 (Correct) GE_HBCSX0 (Error) GE_HBCSX_1 (Correct) GE_HBCSX1

Page	Item	Description
67	10. Block Diagram	Signal name should be corrected as below. (Error) GE_SPCSX_0 (Correct) GE_SPCSX0 (Error) GE_HBCSX_0/1 (Correct) GE_HBCSX0/1
93	14.3 DC Characteristics	"VFLASH memory Standby current" should be corrected as indicated by the shading below. (Error) (Correct)
162, 161, 162	14.4 AC Characteristics	Signal name should be corrected as below. (Error) GE_SPCSX_0 (Correct) GE_SPCSX0 (Error) GE_HBCSX_0 (Correct) GE_HBCSX0 (Error) GE_HBCSX_1 (Correct) GE_HBCSX1

(Error)

Parameter	Symbol	Pin name	Conditions	Value Min	Typ	Max	Unit	Remarks
VFLASH memory Standby current	$I_{CCVFLASH}$	VCC	At Standby	-	15	25	µA	
VFLASH memory Read current			At Read	-	9	14	mA	40MHz
					13	20		80MHz
VFLASH memory write/erase current			At Write/Erase	-	20	25	mA	

(Correct)

Parameter	Symbol	Pin name	Conditions	Value Min	Typ	Max	Unit	Remarks
VFLASH memory Standby current	$I_{CCVFLASH}$	VCC	At Standby	-	15	35	µA	
VFLASH memory Read current			At Read	-	9	14	mA	40MHz
					13	20		80MHz
VFLASH memory write/erase current			At Write/Erase	-	20	25	mA	

Document History Page

Document Title: Datasheet Errata for S6E2D5 Series 32-bit ARM® Cortex®-M4F based Microcontroller Document Number: 002-05034			
Rev.	**ECN No.**	**Orig. of Change**	**Description of Change**
**	—	AKIH	Initial release
*A	5037589	AKIH	Converted to Cypress format
*B	5546786	HTER	Made the corrections to datasheet spec, 002-03982; this spec is now obsolete.

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