



# S6E2D5 Series Datasheet

September 16, 2015

## 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

<b>Part Number</b>
<b>S6E2D5 Series</b>

Page	Item	Description
<b>Original document code: DS709-00021-1v0-E</b>		
<b>Rev. 1.0 June 25, 2015</b>		
64	9. Handling Devices	<p>"Sub Crystal Oscillator" should be added as indicated by the shading below.</p> <ul style="list-style-type: none"> <li>■Surface mount type               <ul style="list-style-type: none"> <li>Size: More than 3.2 mm × 1.5 mm</li> <li>Load capacitance: Approximately 6 pF to 7 pF</li> </ul> </li> <li>When the Standard setting (CCS/CCB=11001110)               <ul style="list-style-type: none"> <li>Load capacitance: Approximately 4 pF to 7 pF</li> </ul> </li> <li>When the low power setting (CCS/CCB=00000100)               <ul style="list-style-type: none"> <li>Load capacitance: Approximately 6 pF to 7 pF</li> </ul> </li> <li>■Lead type               <ul style="list-style-type: none"> <li>Load capacitance: Approximately 4 pF to 7 pF</li> </ul> </li> <li>When the Standard setting (CCS/CCB=11001110)               <ul style="list-style-type: none"> <li>Load capacitance: Approximately 4 pF to 7 pF</li> </ul> </li> <li>When the low power setting (CCS/CCB=00000100)               <ul style="list-style-type: none"> <li>Load capacitance: Approximately 4 pF to 7 pF</li> </ul> </li> </ul>

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92	14.3.1 Current Rating	<p>Table 14-10 should be added as indicated by the shading below.</p> <p><b>Table 14-10 Typical and Maximum Current Consumption in Deep Standby Stop Mode, Deep Standby RTC Mode and VBAT</b></p> <table border="1"> <thead> <tr> <th rowspan="2">Parameter</th> <th rowspan="2">Symbol</th> <th rowspan="2">Pin Name</th> <th rowspan="2">Conditions</th> <th rowspan="2">Frequency (MHz)</th> <th colspan="2">Value</th> <th rowspan="2">Unit</th> <th rowspan="2">Remarks</th> </tr> <tr> <th>Typ</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td rowspan="9">Power supply current</td> <td rowspan="9">ICCVBAT</td> <td rowspan="9">VBAT</td> <td rowspan="3">RTC stop</td> <td rowspan="9">-</td> <td>0.009</td> <td>0.032</td> <td>μA</td> <td>*3, *4, *5 T<sub>A</sub>=+25°C</td> </tr> <tr> <td>-</td> <td>0.994</td> <td>μA</td> <td>*3, *4, *5 T<sub>A</sub>=+85°C</td> </tr> <tr> <td>-</td> <td>1.491</td> <td>μA</td> <td>*3, *4, *5 T<sub>A</sub>=+105°C</td> </tr> <tr> <td rowspan="3">RTC *6 operation</td> <td>1.0</td> <td>1.636</td> <td>μA</td> <td>*3, *4 T<sub>A</sub>=+25°C</td> </tr> <tr> <td>-</td> <td>2.828</td> <td>μA</td> <td>*3, *4 T<sub>A</sub>=+85°C</td> </tr> <tr> <td>-</td> <td>4.242</td> <td>μA</td> <td>*3, *4 T<sub>A</sub>=+105°C</td> </tr> <tr> <td rowspan="3">RTC *7 operation</td> <td>0.7</td> <td>1.153</td> <td>μA</td> <td>*3, *4 T<sub>A</sub>=+25°C</td> </tr> <tr> <td>-</td> <td>2.277</td> <td>μA</td> <td>*3, *4 T<sub>A</sub>=+85°C</td> </tr> <tr> <td>-</td> <td>3.416</td> <td>μA</td> <td>*3, *4 T<sub>A</sub>=+105°C</td> </tr> </tbody> </table> <p>*1: V<sub>CC</sub>=3.3 V                      *2: V<sub>CC</sub>=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)</p>	Parameter	Symbol	Pin Name	Conditions	Frequency (MHz)	Value		Unit	Remarks	Typ	Max	Power supply current	ICCVBAT	VBAT	RTC stop	-	0.009	0.032	μA	*3, *4, *5 T <sub>A</sub> =+25°C	-	0.994	μA	*3, *4, *5 T <sub>A</sub> =+85°C	-	1.491	μA	*3, *4, *5 T <sub>A</sub> =+105°C	RTC *6 operation	1.0	1.636	μA	*3, *4 T <sub>A</sub> =+25°C	-	2.828	μA	*3, *4 T <sub>A</sub> =+85°C	-	4.242	μA	*3, *4 T <sub>A</sub> =+105°C	RTC *7 operation	0.7	1.153	μA	*3, *4 T <sub>A</sub> =+25°C	-	2.277	μA	*3, *4 T <sub>A</sub> =+85°C	-	3.416	μA	*3, *4 T <sub>A</sub> =+105°C
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11	2. Features	<p>Note should be added as indicated by the shading below.</p> <p>(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</p> <p>(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</p> <p>Note:  <i>User can leverage the internal VRAM and external HyperRAM as a graphics memory allowed to be written by GDC.</i></p>																																								
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Rev.	ECN No.	Orig. of Change	Description of Change
**	—	AKIH	Initial release
*A	5037589	AKIH	Converted to Cypress format

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