

# FM4 Family

## 32-BIT Microcontroller

### FM4

#### Peripheral Manual GDC Part

#### Errata Sheet



Page	Item	Description																								
Original document code: MN709-00014-1v0-E																										
Rev. 1.0 February 25, 2015																										
28	CHAPTER 2 4. Registers 4.5 GPCR4	“GPLLN: PLL feedback frequency division ratio setting bits” should be corrected as below.																								
		(Error)																								
		<table><tr><td>bit[6:0]</td><td>Description</td></tr><tr><td>000000</td><td>setting is prohibited</td></tr><tr><td>000001</td><td>setting is prohibited</td></tr><tr><td></td><td>setting is prohibited</td></tr><tr><td>0001011</td><td>setting is prohibited</td></tr><tr><td>0001100</td><td>1/13</td></tr><tr><td>0001101</td><td>1/14</td></tr><tr><td></td><td>1/(GPLLN[6:0] + 1)</td></tr><tr><td>0011111</td><td>1/32</td></tr><tr><td>010000</td><td>setting is prohibited</td></tr><tr><td></td><td>setting is prohibited</td></tr><tr><td>1111111</td><td>setting is prohibited</td></tr></table>	bit[6:0]	Description	000000	setting is prohibited	000001	setting is prohibited		setting is prohibited	0001011	setting is prohibited	0001100	1/13	0001101	1/14		1/(GPLLN[6:0] + 1)	0011111	1/32	010000	setting is prohibited		setting is prohibited	1111111	setting is prohibited
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Rev. 2.0 September 04, 2015																																																								
6	The target products in this manual	“Table 4 TYPE4-M4 Product list” should be corrected as below.																																																						
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		<table><tr><th rowspan="3">Description in this manual</th><th colspan="3">Flash memory size 384 Kbytes</th></tr><tr><th colspan="2">VRAM Size</th><th rowspan="2">VRAM 512 Kbytes + VFLASH 2 Mbytes</th></tr><tr><th>512 Kbytes</th><th>384 Kbytes</th></tr><tr><td rowspan="20">TYPE4-M4</td><td>S6E2D35G0AGB10</td><td>S6E2D35GAAGB10</td><td rowspan="5">S6E2D35GJAMV20</td></tr><tr><td>S6E2D35G0AGV20</td><td>S6E2D35GAAGV20</td></tr><tr><td>S6E2D35G0AGZ20</td><td>S6E2D35GAAGZ20</td></tr><tr><td>S6E2D35J0AGV20</td><td>S6E2D35JAAGV20</td></tr><tr><td>S6E2D35J0AGZ20</td><td>S6E2D35JAAGZ20</td></tr><tr><td>S6E2D55G0AGB10</td><td>S6E2D55GAAGB10</td><td rowspan="5">S6E2D55GJAMV20</td></tr><tr><td>S6E2D55G0AGV20</td><td>S6E2D55GAAGV20</td></tr><tr><td>S6E2D55G0AGZ20</td><td>S6E2D55GAAGZ20</td></tr><tr><td>S6E2D55J0AGV20</td><td>S6E2D55JAAGV20</td></tr><tr><td>S6E2D55J0AGZ20</td><td>S6E2D55JAAGZ20</td></tr><tr><td>S6E2DF5G0AGB10</td><td>S6E2DF5GAAG10</td><td rowspan="5">S6E2DF5GJAMV20</td></tr><tr><td>S6E2DF5G0AGV20</td><td>S6E2DF5GAAGV20</td></tr><tr><td>S6E2DF5G0AGZ20</td><td>S6E2DF5GAAGZ20</td></tr><tr><td>S6E2DF5J0AGV20</td><td>S6E2DF5JAAGV20</td></tr><tr><td>S6E2DF5J0AGZ20</td><td>S6E2DF5JAAGZ20</td></tr><tr><td>S6E2DH5G0AGB10</td><td>S6E2DH5GAAGB10</td><td rowspan="5">S6E2DH5GJAMV20</td></tr><tr><td>S6E2DH5G0AGV20</td><td>S6E2DH5GAAGV20</td></tr><tr><td>S6E2DH5G0AGZ20</td><td>S6E2DH5GAAGZ20</td></tr><tr><td>S6E2DH5J0AGV20</td><td>S6E2DH5JAAGV20</td></tr><tr><td>S6E2DH5J0AGZ20</td><td>S6E2DH5JAAGZ20</td></tr></table>	Description in this manual	Flash memory size 384 Kbytes			VRAM Size		VRAM 512 Kbytes + VFLASH 2 Mbytes	512 Kbytes	384 Kbytes	TYPE4-M4	S6E2D35G0AGB10	S6E2D35GAAGB10	S6E2D35GJAMV20	S6E2D35G0AGV20	S6E2D35GAAGV20	S6E2D35G0AGZ20	S6E2D35GAAGZ20	S6E2D35J0AGV20	S6E2D35JAAGV20	S6E2D35J0AGZ20	S6E2D35JAAGZ20	S6E2D55G0AGB10	S6E2D55GAAGB10	S6E2D55GJAMV20	S6E2D55G0AGV20	S6E2D55GAAGV20	S6E2D55G0AGZ20	S6E2D55GAAGZ20	S6E2D55J0AGV20	S6E2D55JAAGV20	S6E2D55J0AGZ20	S6E2D55JAAGZ20	S6E2DF5G0AGB10	S6E2DF5GAAG10	S6E2DF5GJAMV20	S6E2DF5G0AGV20	S6E2DF5GAAGV20	S6E2DF5G0AGZ20	S6E2DF5GAAGZ20	S6E2DF5J0AGV20	S6E2DF5JAAGV20	S6E2DF5J0AGZ20	S6E2DF5JAAGZ20	S6E2DH5G0AGB10	S6E2DH5GAAGB10	S6E2DH5GJAMV20	S6E2DH5G0AGV20	S6E2DH5GAAGV20	S6E2DH5G0AGZ20	S6E2DH5GAAGZ20	S6E2DH5J0AGV20	S6E2DH5JAAGV20	S6E2DH5J0AGZ20	S6E2DH5JAAGZ20
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116	Appendixes A.Register Map 1.Register Map 1.4 Clock/Reset	<p>The register of Clock/Reset should be corrected as indicated by shading bellow.</p> <p>(Error)</p> <table><tr><th rowspan="2">Base_Address + Address</th><th colspan="4">Register</th></tr><tr><th>+3</th><th>+2</th><th>+1</th><th>+0</th></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td>0x068</td><td>-</td><td>-</td><td>-</td><td>INT_CLR[W] -0-000</td></tr><tr><td>0x06C – 0xFFC</td><td>-</td><td>-</td><td>-</td><td>-</td></tr></table> <p>(Correct)</p> <table><tr><th rowspan="2">Base_Address + Address</th><th colspan="4">Register</th></tr><tr><th>+3</th><th>+2</th><th>+1</th><th>+0</th></tr><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td>0x068</td><td>-</td><td>-</td><td>-</td><td>INT_CLR[W] -0-000</td></tr><tr><td>0x06C – 0x070</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>0x074</td><td colspan="4">PLLCG_CTL[W] ----- 11111111 00000000 00----00</td></tr><tr><td>0x078 – 0xFFC</td><td>-</td><td>-</td><td>-</td><td>-</td></tr></table>	Base_Address + Address	Register				+3	+2	+1	+0						0x068	-	-	-	INT_CLR[W] -0-000	0x06C – 0xFFC	-	-	-	-	Base_Address + Address	Register				+3	+2	+1	+0						0x068	-	-	-	INT_CLR[W] -0-000	0x06C – 0x070	-	-	-	-	0x074	PLLCG_CTL[W] ----- 11111111 00000000 00----00				0x078 – 0xFFC	-	-	-	-
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228	Appendixes A.Register Map 1.Register Map 1.48 GDC Sub System SDRAM Controller	<p>Base_Address of GDC Sub system SDRAM controller should be corrected as indicated by the shading bellow.</p> <p>(Error)</p> <p>GDC Sub system SDRAM controller      Base_Address : 0xD0A3_0000</p> <p>(Correct)</p> <p>GDC Sub System SDRAM <b>Controller</b>      Base_Address : 0xD0A0_3000</p>																																																										

Page	Item	Description
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12	1. Overview 1.1 Feature Summary 1.1.1 General features	<p>Note should be added as indicated by the shading below.</p> <p>(Error)</p> <p><b>1.1.1 General Features</b></p> <ul style="list-style-type: none"> <li>■ Controller for external graphics display.</li> <li>■ Accelerator for 2D block image transfer (blit) operations.</li> <li>■ Embedded SRAM video memory.</li> <li>■ Multilayer GDC bus matrix with master and slave ports.</li> <li>■ Signature computation for display content (use: data integrity/safety requirements)</li> <li>■ Command Sequencer for graphic operations.</li> <li>■ Quad SPI (Serial Peripheral Interface) for external memory extensions.</li> <li>■ SDRAM interface for external memory extensions.</li> <li>■ HBI (Hyper Bus Interface) interface for external memory extensions.</li> <li>■ Two processing pipeline (blit / display).</li> <li>■ Maximum core system clock frequency: Refer to the Data sheet.</li> </ul> <p>(Correct)</p> <p><b>1.1.1 General Features</b></p> <ul style="list-style-type: none"> <li>■ Controller for external graphics display.</li> <li>■ Accelerator for 2D block image transfer (blit) operations.</li> <li>■ Embedded SRAM video memory.</li> <li>■ Multilayer GDC bus matrix with master and slave ports.</li> <li>■ Signature computation for display content (use: data integrity/safety requirements)</li> <li>■ Command Sequencer for graphic operations.</li> <li>■ Quad SPI (Serial Peripheral Interface) for external memory extensions.</li> <li>■ SDRAM interface for external memory extensions.</li> <li>■ HBI (Hyper Bus Interface) interface for external memory extensions.</li> <li>■ Two processing pipeline (blit / display).</li> <li>■ Maximum core system clock frequency: Refer to the Data sheet.</li> </ul> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>- <i>User can leverage internal VRAM and external HyperRAM as a graphics memory allowed to be written by GDC.</i></li> </ul>