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Datasheet Correction: TMPM46BF10

We would like to inform customers the corrections of the following datasheets. If you have any questions or require any further information, please contact your local sales office.

1. Products

   TMPM46BF10FG

2. Data sheet

   TMPM46BF10FG_datasheet_en_20151112.pdf

3. Correction

[Crrection(1)]

- Section number : 6.2.3 CGOSCCR (Oscillation control register) --- Page 46

= Before correction =

Bit	Bit Symbal	Type	機能
31-20	WUPT[11:0]	R/W	Warm-up counter setup value. Setup the 16-bit timer for warm-up timer of upper 12-bits counter value.
13-11	-	R	Read as "0".

= After correction =

Bit	Bit Symbal	Type	機能
31-20	WUPT[11:0]	R/W	Warm-up counter setup value. Setup the 16-bit timer for warm-up timer of upper 12-bits counter value.
13	**-**	**R**	**Read as "0".**
12	**-**	**R/W**	**Write as "0".**
11	**-**	**R**	**Read as "0".**

[Crrection(2)]

- Section number : 11.1 Outline --- Page 205
- Correction part : Table 11-2

= Before correction =

Memory size	Block		
	The number of blocks	Size (byte)	The number of pages
1GB (128M x 8 bit)	1024	128K + 4K	64
		128K + 8K	
2GB (256M x 8 bit)	2048	128K + 4K	
		128K + 8K	
4GB (512M x 8 bit)		256K + 14K	
		256K + 16K	

= After correction =

Memory size (bit)	Block		
	The number of blocks	Size (byte)	The number of pages
1G (128M x 8 bit)	1024	128K + 4K	64
		128K + 8K	
2G (256M x 8 bit)	2048	128K + 4K	
		128K + 8K	
4G (512M x 8 bit)		256K + 14K	
		256K + 16K	

[Crrection(3)]

- Section number : 18.6.2.2 Clock Selection Circuit --- Page 464
- Correction part : (2) Transfer clock in the UART mode

= Before correction =

Baud rate calculation

$$\text{Transfer rate} = \frac{\text{Clock frequency selected by CGSYSCR<PRCK[1:0]>}}{(\text{TBxRG1} \times 2) \times 2 \times 16}$$

In the case the timer prescaler clock ΦT1 (2divition ratio) is selected.

One clock cycle is a period that the timer flip-flop is inverted twice.

= After correction =

Baud rate calculation

$$\text{Transfer rate} = \frac{\text{Clock frequency selected by CGSYSCR<PRCK[2:0]>}}{(\text{TBxRG1} \times 2) \times 2 \times 16}$$

In the case the timer prescaler clock ΦT1 (2divition ratio) is selected.

One clock cycle is a period that the timer flip-flop is inverted twice.

[Crrection(4)]

- Section number ：26.1.4 Memory Map --- Page 655
- Correction part ：The note of the table.

= Before correction =

Product	Flash size	RAM size	Flash address	RAM address
TMPM46BF10FG	1024 KB	514KB	0x0000_0000 to 0x000F_FFFF (Single chip mode) 0x5E00_0000 to 0x5E0F_FFFF (Single dhip mode(mirror)) 0x5E00_0000 to 0x5E0F_FFFF (Single boot mode)	0x2000_0000 to 0x2008_07FF

Note:In 1024KB product,there is a common memory area for ID and password (0x5E17_FFF0 to 0x5E17_FFFF).

= After correction =

Product	Flash size	RAM size	Flash address	RAM address
TMPM46BF10FG	1024 KB	514KB	0x0000_0000 to 0x000F_FFFF (Single chip mode) 0x5E00_0000 to 0x5E0F_FFFF (Single dhip mode(mirror)) 0x5E00_0000 to 0x5E0F_FFFF (Single boot mode)	0x2000_0000 to 0x2008_07FF

[Crrection(5)]

- Section number ：26.3.3 Restrictions on Built-in Memories --- Page 691
- Correction part ：Table 26-15

= Before correction =

Memory	Restrictions
Internal Flash memory	The following addresses are assigned for storing software ID information and passowerds. Should not use the following address for program storage. 0x5E00_03F0 ~ 0x5E00_03FF

= After correction =

Memory	Restrictions
Internal Flash memory	The following addresses are assigned for storing software ID information and passowerds. Should not use the following address for program storage. 0x5E0F_FFF0 to 0x5E0F_FFFF

[Crrection(6)]

・Section number ：26.3.5.3 Password Determination --- Page 695

= Before correction =

Area	Address
Examination of necessity of password	0x5E00_03F0 (1byte)
Password	0x5E00_03F4 ~ 0x5E00_03FF (12byte)

= After correction =

Area	Address
Examination of necessity of password	**0x5E0F_FFF0 (1byte)**
Password	**0x5E0F_FFF4 ～ 0x5E0F_FFFF (12byte)**

[Crrection(7)]

・Section number ：29.4 12-bit AD Converter Electrical Characteristics --- Page 734

= Before correction =

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Analog reference voltage (+)	AVDD3/ VREFH	-	AVDD3-0.3	-	AVDD3	V

= After correction =

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Analog reference voltage (+)	**AVDD3 (VREFH)**	-	**AVDD3(VREFH) - 0.3**	-	**AVDD3(VREFH)**	V

4. Other

・Important notices in the past

Please refer to the following on the TMPM46BF10FG website.

- Datasheet Correction: Asynchronous-serial-communication interface(UART)
- Datasheet Correction: AD converter (1)