Date: Apr. 7, 2015

RENESAS TECHNICAL UPDATE

1753, Shimonumabe, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8668 Japan Renesas Electronics Corporation

Product Category	MPU/MCU	Document No.	TN-V85-A017A/E	Rev.	1.00	
Title	V850E/IG3 Usage Restriction about bus control function.		Information Category	Usage Restriction		
Applicable Product	V850E/IG3 series	Lot No.	Reference Document	* 32 bits of user's manual V850E/IF3,V850E/IG3 and single chip micro controller The hardware volume (the 3rd edition) U18279EJ3V0UD00		
		All lots				

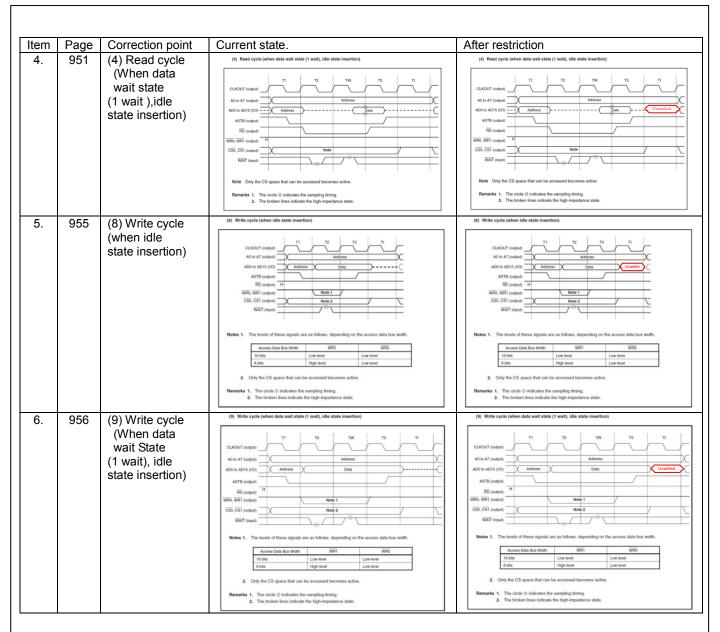
A restriction matter of a bus control function was revealed about V850E/IG3.

1. The detail of restriction

When using a bus control function, AD0-AD15 terminal becomes unsettled at idle State.

User's manual are corrected as follows.

Item	Page	Correction point	Current state.	After restriction			
1.	54.	Table 2-2	Table 2-2. Pin Operation Status in Operation Modes Constitut Status Reset HALT Mode/ (DLF Mode/ Idle State)	Table 2-2. Pin Operation Status in Operation Modes Consolino Status Reset HALT Mode/ IDLE Mode/ Idle State			
		Pin Operation	Pin During DMA Transfer STOP Mode	Pin During DMA Transfer STOP Mode			
		status in	AD0 to AD15 ⁹⁸¹ (PDL0 to Hi-Z ⁹⁸⁸⁾ Operating Hi-Z Hald PDL15)	AD0 to AD15**** (PDL0 to H-2**** Operating Hi-Z Unsettled. PDL15)			
			A0 to A7 ^{text} (P10 to P17) Hr.Z ^{text} Operating Hr.Z Hald CS0 ^{text} , CS1 ^{text} (P34, P32) Hr.Z ^{text} Operating H Held	A0 to A7 ^{max1} (P10 to P17) H-Z ^{max2} Operating H-Z Held CSO ^{max1} , CSS ^{max2} (P34, P32) H-Z ^{max2} Operating H Held			
		Operation	WRO ^{Max.} WR1 ^{Max.} (P46, P45) Hi-Z ^{Max.} Operating H H	WR0 ^{man} , WR1 ^{man} (P46, P45) H-Z ^{man} Operating H H			
		Modes.	RO ^{man} (P47) Hr.2 ^{man} Operating H H ASTB ^{man} (P37) Hr.2 ^{man} Operating H H	RD ^{max} (P47) H-Z ^{max} Operating H H ASTB ^{max} (P37) H-Z ^{max} Operating H H			
		Wodes.	WAIT ^{trant} (P44) Hi-Z ^{trant} Operating	WAIT ^{tree+} (P44) H-Z ^{tree+} Operating			
			CLKOUT ^{elest} (P07) Hi-Z ^{the2} Operating Held Operating	CLKOUT**** (P07) H-Z**** Operating Held Operating			
			Notes 1PC0767343GC-8EA-2 and 70F365F1-D35-A only 2. Since the bus control pin is also used an a port pin, it is initialized to the input mode (port mode) after nexest.	Notes 1#D70F34540C-8EA-A and 7673454F1-0A9-A only 2. Since the bus centred pin is also used as a port pin, it is initialized to the input mode (port mode) after reset.			
2.	946	(1) bus cycle control register (BCC)	Cautions 1. The Internal ROM, Internal RAM, and on-chip peripheral I/O areas are not subject to idia state insertion. 2. Writs to the BCC register after reset, and then do not change the set values. Also, when changing the Intial values of the BCC register, do not access an external memory area until the settings are complete. However, it is possible to access external memory areas whose initiatization settings are complete. 3. The chip select signal (CSG) does not become active in the idle state (n = 0, 1).	Caudions 1. The internal ROM, internal RAM, and on-chip peripheral I/O areas are not subject to idle state insertion. 2. Writs to the BCC register after reset, and then do not change the set values. Also, when changing the initial values of the BCC register, do not access an external memory area until the settings are complete. However, it is possible to access external memory areas whose initialization settings are complete. 3. The chip select signal (Clin) does not become active in the idle state (n = 0, 1). 4. In the idle state and ADO-AD15 terminal will be unsettled output.			
3.	950	(3) Read cycle	(3) Read cycle (when idle state insertion)	(3) Read cycle (when idle state insertion)			
		(When idle state insertion)	CLROUT (output) Ad to A7 (output) AD to A7 (output) AD to A5 (output) WIRD, WIRT (output) WIRD, WIRT (output) Note Crely the CS space that can be accessed becomes active. Remarks 1. The circle O indicates the sampling timing. 2. The broken lines indicate the high-impedance state.	CLKOUT (output) Ad to AT (output) AD to AT (output) AD to AT (output) AD to AT (output) Fill (output) WHX. Will (output) WAT (output) WAT (output) Note Crity the CS space that can be accessed becomes active. Remarks 1. The circle O indicates the sampling fining. 2. The broken lines indicate the high-impedance state.			



2. Workaround

When using the bus function, be careful so that a signal of AD0-AD15 terminal doesn't collide with idle state.

This issue is not planned for correction. It will be made usage restriction.

Please inquire to our salesperson about details.