Electrical Characteristics Changes for FIFO Memory

Feature	Parameter	CY7C4215V/CY7C4225V/CY 7C4235V/CY7C4245V	(CY7C4255V)	Impact
Memory Size	Density	512X18/1KX18/ 2KX18/4KX18	8KX18	No. R42 devices offer higher density
Electrical	ISB	6mA	4mA	No. Better spec in R42
	5V tolerant inputs/VIH(max)	Yes	No	Yes. 5V inputs (VIHmax) not supported in R42
TIMING	tA (max)	11 ns	10 ns	No. Better spec in R42
	tDH (min), tENH (min)	1 ns	0 ns	No. Better spec in R42
	tRSF	18 ns	15 ns	No. Better spec in R42
	tWFF, tREF	11 ns	10 ns	No. Better spec in R42
	tPAFsynch,tPAEsynch when VCC/ SMODE# pin tied to VSS	11 ns	10 ns	No. Better spec in R42
	tPAFsynch,tPAEsynch when VCC/ SMODE# pin tied to VCC	18 ns	16 ns	No. Better spec in R42
	tPRT	15 ns	60 ns	Yes. Longer Retransmit pulse width required in R42
	tRTR	15 ns	90 ns	Yes. Longer Retransmit assertion to flag Valid in R42
LOGIC	Output Status Flags (EF#, FF#, PAE#, PAF# and FF#)	Follow flag Truthtable as shown in Table.2 page 5 of the datasheet	Follow flag Truthtable as shown in Table.3 page 5 of the datasheet	Yes. The user needs to update logic per R42 flag truthtable.

Electrical Characteristics Changes for Dual Port Memory

Feature	Parameter	CY7C025/CY7C024/CY7C0241 (Only industrial parts)	CY7C025E/CY7C024E /CY7C0241E (Only industrial parts)	Impact
Operating Current	ICC (Typical / Max)	200/320	215/305	Yes - Industrial parts has more typical ICC
	ISB1 (Typical / Max)	50/70	65/95	Yes
	ISB2 (Typical / Max)	120/180	120/180	No
	ISB3 (Typical / Max)	3.0 / 15	0.05/0.5	No - R4 devices provides better standby current
	ISB4 (Typical / Max)	110/160	125/175	Yes