

Date: April 2004

Subject: *Hynix Wafer Fab CMOS 0.5 μ m 1P2M Reliability Report*

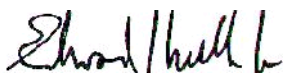
Pericom recently added several Bus Switch device types to the 0.5 μ m process we use at Hynix for the following device types: PI5C3125, PI5C3126, PI5C3253, PI5C3257, PI5C33X257, PI5V330, PI5V331, PI5V332, and PI5L100. The 3257 was selected as the best representative Qualification vehicle since it is the highest volume product. The test results are shown below.

Rel Lot #	Device Type	Pkg. Type	Date Code	Stress Test	Sample Units	Stress Duration	Results Pass/Fail
Q03009-1A	PI5C3257S	S16	Z0332OG	DHTOL	130	168 hrs	130/0
Q03009-1A	PI5C3257S	S16	Z0332OG	DHTOL	130	500 hrs	130/0
Q03009-1A	PI5C3257S	S16	Z0332OG	DHTOL	130	1000 hrs	130/0
Q03009-1A	PI5C3257S	S16	Z0332OG	DHTOL	130	2000 hrs	130/0
Q03009-1A	PI5C3257S	S16	Z0332OG	DHTOL	130	3000 hrs	130/0
Q03009-1B	PI5C3257S	S16	Z0332OG	HTSL	100	168 hrs	100/0
Q03009-1B	PI5C3257S	S16	Z0332OG	HTSL	100	500 hrs	100/0
Q03009-1B	PI5C3257S	S16	Z0332OG	HTSL	100	1000 hrs	100/0
Q03009-2B	PI5C3257S	S16	Z0332OG	PTMCL	76	500 cyc	76/0
Q03009-2C	PI5C3257S	S16	Z0332OG	UHAST	76	168 hrs	76/0
N/A	PI5C3257S	S16	Z0332OG	ESD	5	>2000 v	Pass
N/A	PI5C3257S	S16	Z0332OG	Latch-up	5	>200 ma	Pass

These products use Hynix's 5 volt, CMOS, 0.5-micron, 1P/2M process on 200-mm wafers. The long-term life test FIT rate is 33 for any devices using the same process and design rules, with an MTBF of 390,000 hours. The calculation was made using the Arrhenius equation, with an Activation energy of 0.5 eV, an assumed system operating temperature of 55 °C, and a Confidence factor of 60%.

If there are any questions about the qualification of this product, please let me know.

Regards,



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