



4/17/2012

**RELIABILITY MONITOR REPORT
FOR**

MFN 5 μ m Metal Gate (M5)

MAXIM Integrated Products

**120 San Gabriel Dr.
Sunnyvale, CA 94086**

**This Report was prepared by
Maxim Reliability Engineering**

Summary:

The data in the tables that follow was generated as the result of an on-going Process Reliability Monitor. The specific products in this process monitor are:

ICL7660AMTV/8	ICL7660CTV	ICM7555ITV
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The calculated failure rate for devices using this process is:

FAILURE RATE: MTTF (YRS): 69277 QUANTITY: 420 FAILS: 0 FITS: 1.6

The parameters used to calculate this failure rate are as follows:

Cf: 60% Ea: 0.7 Tu: 25 °C

The reliability data follows and in this section is the detailed reliability data by stress. The reliability data section includes the latest data available. This report covers data between 4/1/2011 and 3/31/2012 .

Process Information:

Process Description: MFN 5µm Metal Gate (M5)

OPERATING LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
HIGH TEMP OP LIFE	1108	ICL7660AMTV/883B	135C	1000 HRS	45	0	NYFAGK2B5Q1
HIGH TEMP OP LIFE	1108	ICL7660AMTV/883B	135C	500 HRS	45	0	NYFAGK2B5Q2
HIGH TEMP OP LIFE	1108	ICL7660AMTV/883B	135C	1000 HRS	45	0	NYFAGK2B5Q3
HIGH TEMP OP LIFE	1108	ICL7660AMTV/883B	135C	1000 HRS	45	0	NYFAGK2B5Q3
HIGH TEMP OP LIFE	1152	ICL7660CTV	135C	1000 HRS	80	0	NYFAGA3B4Q1
HIGH TEMP OP LIFE	1152	ICL7660CTV	135C	1000 HRS	80	0	NYFAGA3B4Q2
HIGH TEMP OP LIFE	1152	ICL7660CTV	135C	1000 HRS	80	0	NYFAGA3B4Q3
Total:						0	

STORAGE LIFE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
STORAGE LIFE	1105	ICM7555ITV	150C	500 HRS	77	0	NCAAAA041Q1
STORAGE LIFE	1108	ICL7660AMTV/883B	150C	1000 HRS	77	0	NYFAGK2B5Q1
STORAGE LIFE	1108	ICL7660AMTV/883B	150C	1000 HRS	77	0	NYFAGK2B5Q2
STORAGE LIFE	1108	ICL7660AMTV/883B	150C	1000 HRS	77	0	NYFAGK2B5Q3
Total:						0	

TEMPERATURE CYCLE

DESCRIPTION	DATE CODE	TEST VEHICLE	CONDITION	READPOINT	QUANTITY	FAILS	LOT NO.
TEMP CYCLE, 5' RAMP, 10' DWELL	1105	ICM7555ITV	-65C TO 150C	1000 CYS	73	0	NCAAAA041Q1
TEMP CYCLE, 5' RAMP, 10' DWELL	1108	ICL7660AMTV/883B	-65C TO 150C	1000 CYS	77	0	NYFAGK2B5Q1
TEMP CYCLE, 5' RAMP, 10' DWELL	1108	ICL7660AMTV/883B	-65C TO 150C	1000 CYS	77	0	NYFAGK2B5Q2

TEMP CYCLE, 5' RAMP, 1108 ICL7660AMTV/883B -65C TO 150C 1000 CYS 77 0 NYFAGK2BQ3
10' DWELL

Total: 0

FAILURE RATE: **MTTF (YRS): 69277** **QUANTITY: 420** **FAILS: 0** **FITS: 1.6**