

Please note that Cypress is an Infineon Technologies Company.

The document following this cover page is marked as “Cypress” document as this is the company that originally developed the product. Please note that Infineon will continue to offer the product to new and existing customers as part of the Infineon product portfolio.

Continuity of document content

The fact that Infineon offers the following product as part of the Infineon product portfolio does not lead to any changes to this document. Future revisions will occur when appropriate, and any changes will be set out on the document history page.

Continuity of ordering part numbers

Infineon continues to support existing part numbers. Please continue to use the ordering part numbers listed in the datasheet for ordering.

Cypress Semiconductor Product Qualification Report

QTP # 145002 VERSION
December 2015**

Atlas Device Family	
S8PR2-10R Technology, Fab 4 CMI	
CY27410*	4-PLL Spread-Spectrum Clock Generator

FOR ANY QUESTIONS ON THIS REPORT, PLEASE CONTACT
reliability@cypress.com or via a CYLINK CRM CASE

Prepared By:
Josephine Pineda (JYF)
Reliability Engineer

Reviewed By:
Zhaomin Ji
Reliability Engineer Principal

Approved By:
Don Darling (DCDA)
Reliability Director

PRODUCT QUALIFICATION HISTORY

QTP Number	Description of Qualification Purpose	Date
083401	Qualify SONOS S8DI-5R Technology in Fab 4 using PSoC 8C20066BC Krypton Device	Jan 2009
145002	Qualify Atlas Device (7C85400A) at Fab 4 using S8PR2-10R Technology	June 2015

PRODUCT DESCRIPTION (for qualification)	
Qualification Purpose: To qualify Atlas device (7C85400A) at Fab 4 using S8PR2-10R technology	
Marketing Part #:	CY27410*
Device Description:	4-PLL Spread-Spectrum Clock Generator
Cypress Division:	Cypress Semiconductor – Memory Product Division (MPD)

TECHNOLOGY/FAB PROCESS DESCRIPTION			
Number of Metal Layers:	5	Metal Composition:	Metal 1: 100A Ti / 3200A Al 0.5%Cu / 300A TiW Metal 2: 100A Ti/3200A Al 0.5% Cu/350A TiW Metal 3: 150A Ti / 7200A Al 0.5%Cu / 350A TiW Metal 4: 150A Ti / 7200A Al 0.5%Cu / 300A TiW Metal 5: 300A Ti / 12000A Al 0.5%Cu / 300A TiW
Passivation Type and Materials		NFUXOX / Nitride	
Passivation Thickness		1000A / 6000A	
Number of Transistors in Device		9,80,876	
Gate Oxide Material		SiO2	
Gate Oxide Thickness		32A / 120A	
Generic Process Technology/Design Rule		S8PR2-10	
Name of Die Fab Facility		CMI	
Name & Location of Die Fab Facility		CMI	
Die Fab Line ID		Fab 4	
Wafer Process ID		S8PR2-10	

PACKAGE AVAILABILITY

PACKAGE	ASSEMBLY FACILITY SITE	WIRE MATERIAL	QTP NUMBER
48L QFN	CML-RA	CuPd	QTP# 150304
48L QFN	ASEK-Taiwan (G)	CuPd	QTP# 152903

MAJOR PACKAGE INFORMATION USED IN THIS QUALIFICATION

Package Designation:	LT48D
Package Outline, Type, or Name:	Quad Flat No Lead (QFN), 7x7x1.0mm
Mold Compound Name/Manufacturer:	G700Y/Sumitomo
Mold Compound Flammability Rating:	V-0/UL94
Oxygen Rating Index: >28%	54%
Lead Frame Designation:	FMP
Lead Frame Material:	Copper
Lead Finish, Composition / Thickness:	Roughened NiPdAu
Die Backside Preparation Method/Metallization:	Backgrind
Die Separation Method:	Saw Process
Die Attach Supplier:	Henkel
Die Attach Material:	QMI-519
Bond Diagram Designation	001-92269
Wire Bond Method:	Thermosonic
Wire Material/Size:	0.8 mil /CuPd
Thermal Resistance Theta JA °C/W:	15.64 °C /W
Package Cross Section Yes/No:	Yes
Assembly Process Flow:	001-97434
Name/Location of Assembly (prime) facility:	CML-RA
MSL Level	3
Reflow Profile	260C

ELECTRICAL TEST / FINISH DESCRIPTION

Test Location:	CML-RA
----------------	--------

MAJOR PACKAGE INFORMATION USED IN THIS QUALIFICATION

Package Designation:	LT48D
Package Outline, Type, or Name:	Quad Flat No Lead (QFN), 7x7x1.0mm
Mold Compound Name/Manufacturer:	EME-G700LA/Sumitomo
Mold Compound Flammability Rating:	V-0/UL94
Oxygen Rating Index: >28%	54%
Lead Frame Designation:	FMP
Lead Frame Material:	Copper
Lead Finish, Composition / Thickness:	Pure Sn
Die Backside Preparation Method/Metallization:	Backgrind
Die Separation Method:	Saw Process
Die Attach Supplier:	Hitachi
Die Attach Material:	EN-4900F
Bond Diagram Designation	001-96271
Wire Bond Method:	Thermosonic
Wire Material/Size:	0.8 mil /CuPd
Thermal Resistance Theta JA °C/W:	15.64 °C /W
Package Cross Section Yes/No:	Yes
Assembly Process Flow:	49-41999
Name/Location of Assembly (prime) facility:	ASEK-Taiwan (G)
MSL Level	3
Reflow Profile	260C

ELECTRICAL TEST / FINISH DESCRIPTION

Test Location:	ASEK-Taiwan (G)
----------------	-----------------

RELIABILITY TESTS PERFORMED PER SPECIFICATION REQUIREMENTS

Stress/Test	Test Condition (Temp/Bias)	Result P/F
Acoustic Microscopy	J-STD-020 Precondition: JESD22 Moisture Sensitivity Level (192 Hrs., 30 °C, 60% RH, 260°C Reflow)	P
Age Bond Strength	200C, 4hrs MIL-STD-883, Method 883-2011	P
Data Retention	150°C, No Bias JESD22-A117 and JESD22-A103	P
Dynamic Latch-up	125°C, 8.5V JESD78	P
Electrostatic Discharge Charge Device Model (ESD-CDM)	500V/750V/1,000V/1,250V/1,500V/1,750V/2,000V JESD22-C101	P
Electrostatic Discharge Human Body Model (ESD-HBM)	1,100V/2,200V /3,300V/4,000V/5,000V/6,000V JESD22, Method A114	P
Electrostatic Discharge Machine Model (ESD-MM)	200V, 220V, 275V, 330V JESD22-A115	P
Endurance Test	MIL-STD-883, Method 883-1033/ JESD22-A117	P
High Accelerated Saturation Test (HAST)	JEDEC STD 22-A110: 130°C, 85% RH, 5.25V Precondition: JESD22 Moisture Sensitivity Level (192 Hrs., 30 °C, 60% RH, 260°C Reflow)	P
High Temperature Operating Life Early Failure Rate	Dynamic Operating Condition, Vcc Max=2.07V, 125°C Dynamic Operating Condition, Vcc Max=2.1V, 150°C JESD22-A-108	P
High Temperature Operating Life Early Failure Rate, Regulator On	Dynamic Operating Condition, Vcc Max=5V, 125°C/150°C Dynamic Operating Condition, Vcc Max=3.96V, 125°C JESD22-A-108	P
High Temperature Operating Life Latent Failure Rate	Dynamic Operating Condition, Vcc Max=2.07V, 125°C Dynamic Operating Condition, Vcc Max=2.1V, 150°C JESD22-A-108	P
High Temperature Steady State life	Static Operating Condition, Vcc Max=2.1V, 150°C JESD22-A-108	P
Low Temperature Operating Life	Dynamic Operating Condition, -30°C, 2.1V JESD22-A108	P
Low Temperature Storage Life	-40°C, No Bias	P
Pressure Cooker	JESD22-A102:121°C /100%RH, 15 PSIG Precondition: JESD22 Moisture Sensitivity Level (192 Hrs., 30 °C, 60% RH, 260°C Reflow)	P
SEM Analysis	MIL-STD-883, Method 2018	P
Static Latch-up	85C/125C, +/-140mA 85C, +/- 200mA, +/-300mA JESD 78	P
Temperature Cycle	MIL-STD-883, Method 1010, Condition C, -65°C to 150°C Precondition: JESD22 Moisture Sensitivity Level (192 Hrs., 30 °C, 60% RH, 260°C Reflow)	P

RELIABILITY FAILURE RATE SUMMARY

Stress/Test	Device Tested/ Device Hours	# Fails	Activation Energy	Thermal AF ³	Failure Rate
High Temperature Operating Life Early Failure Rate	1,607 Devices	0	N/A	N/A	0 PPM ⁽¹⁾
High Temperature Operating Life Long Term Failure Rate	129,000 DHRs	0	0.7	55	9 FIT ⁽²⁾
	585,000 DHRs	0	0.7	170	

¹ Assuming an ambient temperature of 55°C and a junction temperature rise of 15°C.

² Chi-squared 60% estimations used to calculate the failure rate.

³ Thermal Acceleration Factor is calculated from the Arrhenius equation

$$AF = \exp \left[\frac{E_A}{k} \left[\frac{1}{T_2} - \frac{1}{T_1} \right] \right]$$

where:

E_A = The Activation Energy of the defect mechanism.

K = Boltzmann's constant = 8.62x10⁻⁵ eV/Kelvin.

T₁ is the junction temperature of the device under stress and T₂ is the junction temperature of the device at use conditions.

(1) Early Failure Rate was computed from QTP# 145002

(2) Long Term Failure Rate was computed from QTP# 083401 and 145002

Reliability Test Data

QTP #: 083401

Device	Fab Lot #	Assy Lot #	Assy Loc	Duration	Samp	Rej	Failure Mechanism
--------	-----------	------------	----------	----------	------	-----	-------------------

STRESS: ACOUSTIC, MSL3

CY8C20466 (8C20466AC)	4810486	610828990	Malaysia-CA	COMP	15	0	
CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	COMP	15	0	
CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA	COMP	15	0	

STRESS: AGE BOND STRENGTH

CY8C20566 (8C20566AC)	4827949	610844164	CML-R	COMP	3	0	
CY8C20466 (8C20466AC)	4804681	610822808	Malaysia-CA	COMP	3	0	
CY8C20666 (8C20666AC)	4836589	610852813	Malaysia-CA	COMP	3	0	

STRESS: DATA RETENTION, PLASTIC, 150C

CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	500	77	0	
CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	1000	77	0	
CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA	500	78	0	
CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA	1000	78	0	
CY8C20566 (8C20566AC)	4836589	610851914	CML-R	500	78	0	
CY8C20566 (8C20566AC)	4836589	610851914	CML-R	1000	78	0	

STRESS: ENDURANCE

CY8C20566 (8C20566AC)	4810486	610830786	CML-R	168	77	0	
CY8C20566 (8C20566AC)	4815537	610835437	CML-R	168	77	0	
CY8C20566 (8C20566AC)	4827949	610844164	CML-R	168	79	0	
CY8C20566 (8C20566AC)	4835945	610848270	CML-R	168	78	0	
CY8C20566 (8C20566AC)	4836589	610851914	CML-R	168	76	0	

STRESS: ESD-CHARGE DEVICE MODEL, (500V)

CY8C20566 (8C20566AC)	4810486	610830371	CML-R	500	9	0	
CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	500	9	0	
CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA	500	9	0	

STRESS: SEM CROSS SECTION

CY8C20066 (8C20066AC)	4810486	N/A	N/A	COMP	1	0	
-----------------------	---------	-----	-----	------	---	---	--

STRESS: STATIC LATCH-UP (85C, 8.25V, +/-200mA)

CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA	COMP	6	0	
CY8C20666 (8C20666AC)	4836589	610852813	Malaysia-CA	COMP	6	0	
CY8C20666 (8C20666AC)	4837410	410.23.02	Promex	COMP	6	0	

Company Confidential

A printed copy of this document is considered uncontrolled. Refer to online copy for latest revision.



Reliability Test Data

QTP #: 083401

Device	Fab Lot #	Assy Lot #	Assy Loc	Duration	Samp	Rej	Failure Mechanism
STRESS: ESD-HUMAN BODY CIRCUIT PER JESD22, METHOD A114, (2,200V)							
CY8C20566 (8C20566AC)	4810486	610830371	CML-R	2200	8	0	
CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	2200	8	0	
CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA	2200	8	0	
STRESS: ESD-HUMAN BODY CIRCUIT PER JESD22, METHOD A114, (3,300V)							
CY8C20566 (8C20566AC)	4810486	610830371	CML-R	3300	3	0	
CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	3300	3	0	
CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA	3300	3	0	
STRESS: ESD-MACHINE MODEL, (200V)							
CY8C20236A (8C202662A)	4126494	611143319	KOREA-L	200	5	0	
CY8C20236A (8C202662A)	4125077	611143627	PHIL-MB	200	5	0	
STRESS: ESD-MACHINE MODEL, (220V)							
CY8C20566 (8C20566AC)	4810486	610830371	CML-R	220	6	0	
CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	220	6	0	
CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA	220	6	0	
STRESS: ESD-MACHINE MODEL, (275V)							
CY8C20566 (8C20566AC)	4810486	610830371	CML-R	275	3	0	
CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	275	3	0	
CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA	275	3	0	
STRESS: ESD-MACHINE MODEL, (330V)							
CY8C20566 (8C20566AC)	4810486	610830371	CML-R	330	3	0	
CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	330	3	0	
CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA	330	3	0	
STRESS: DYNAMIC LATCH-UP (125C, 8.5V)							
CY8C20466 (8C20466AC)	4810486	610828990	Malaysia-CA COMP		5	0	
CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA COMP		5	0	
CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA COMP		5	0	

Reliability Test Data

QTP #: 083401

Device	Fab Lot #	Assy Lot #	Assy Loc	Duration	Samp	Rej	Failure Mechanism
--------	-----------	------------	----------	----------	------	-----	-------------------

STRESS: HIGH TEMP DYNAMIC OPERATING LIFE-EARLY FAILURE RATE (150, 2.1V, Vcc Max)

CY8C20566 (8C20566AC)	4827949	610844164	CML-R	48	1002	0	
CY8C20566 (8C20566AC)	4815537	610835437	CML-R	48	1008	0	
CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA	48	1004	1	Read NV Latch (1)
CY8C20466 (8C20466AC)	4836589	610851747	Malaysia-CA	48	1004	0	

STRESS: HIGH TEMP DYNAMIC OPERATING LIFE-EARLY FAILURE RATE REGULATOR ON (150, 5V, Vcc Max)

CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	48	45	0	
CY8C20566 (8C20566AC)	4835945	610848270	CML-R	48	45	0	

STRESS: HIGH TEMP DYNAMIC OPERATING LIFE-EARLY FAILURE RATE REGULATOR ON (125C, 5V, Vcc Max)

CY8C20466 (8C20466AC)	4810486	610828990	Malaysia-CA	96	45	0	
-----------------------	---------	-----------	-------------	----	----	---	--

STRESS: HIGH TEMP DYNAMIC OPERATING LIFE-LATENT FAILURE RATE (150C, 2.1V, Vcc Max)

CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	80	390	0	
CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	500	390	0	
CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA	80	390	0	
CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA	500	390	0	
CY8C20466 (8C20466AC)	4836589	610851747	Malaysia-CA	80	390	0	
CY8C20466 (8C20466AC)	4836589	610851747	Malaysia-CA	500	390	0	

STRESS: HIGH TEMP STEADY STATE LIFE TEST (150C, 2.1V)

CY8C20466 (8C20466AC)	4810486	610828990	Malaysia-CA	80	77	0	
CY8C20466 (8C20466AC)	4810486	610828990	Malaysia-CA	168	77	0	
CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	80	77	0	
CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	168	77	0	
CY8C20566 (8C20566AC)	4835945	610848270	CML-R	80	77	0	
CY8C20566 (8C20566AC)	4835945	610848270	CML-R	168	77	0	

STRESS: LOW TEMPERATURE DYNAMIC OPERATING LIFE, -30C, 2.1V

CY8C20566 (8C20566AC)	4815537	610835437	CML-R	500	77	0	
CY8C20566 (8C20566AC)	4835945	610848270	CML-R	500	77	0	

(1) Destroyed during failure analysis

Reliability Test Data

QTP #: 083401

Device	Fab Lot #	Assy Lot #	Assy Lot	Duration	Samp	Rej	Failure Mechanism
--------	-----------	------------	----------	----------	------	-----	-------------------

STRESS: HI-ACCEL SATURATION TEST (130C, 85%RH, 5.25V), PRE COND 192 HR 30C/60%RH (MSL3)

CY8C20466 (8C20466AC)	4810486	610828990	Malaysia-CA	128	77	0	
CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	128	77	0	
CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	256	77	0	
CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA	128	77	0	

STRESS: PRESSURE COOKER TEST (121C, 100%RH), 15 Psig, PRE COND 192 HR 30C/60%RH (MSL3)

CY8C20466 (8C20466AC)	4810486	610828990	Malaysia-CA	168	77	0	
CY8C20466 (8C20466AC)	4810486	610828990	Malaysia-CA	333	77	0	
CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	168	77	0	
CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	288	77	0	
CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA	168	77	0	
CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA	288	77	0	

STRESS: TC COND. C -65C TO 150C, PRE COND 192 HRS 30C/60%RH (MSL3)

CY8C20466 (8C20466AC)	4810486	610828990	Malaysia-CA	500	77	0	
CY8C20466 (8C20466AC)	4810486	610828990	Malaysia-CA	1000	77	0	
CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	500	77	0	
CY8C20466 (8C20466AC)	4815537	610834184	Malaysia-CA	1000	77	0	
CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA	500	77	0	
CY8C20466 (8C20466AC)	4835945	610847274	Malaysia-CA	1000	77	0	



Reliability Test Data

ER114031

Device	Fab Lot #	Assy Lot #	Assy Lot	Duration	Samp	Rej	Failure Mechanism
---------------	------------------	-------------------	-----------------	-----------------	-------------	------------	--------------------------

STRESS: LOW TEMPERATURE STORAGE, -40C, No Bias

CY8C20236A (8C202662A)	4137730	611155459	L-KOREA	1000	100	0	
------------------------	---------	-----------	---------	------	-----	---	--



Reliability Test Data

QTP #: 145002

Device	Fab Lot #	Assy Lot #	Assy Loc	Duration	Samp	Rej	Failure Mechanism
--------	-----------	------------	----------	----------	------	-----	-------------------

STRESS: ACOUSTIC, MSL3

CY27410FLTXI (7CP85400A)	4450445	611505676/79/81/82	CML-RA	COMP	15	0	
--------------------------	---------	--------------------	--------	------	----	---	--

STRESS: DATA RETENTION, PLASTIC, 150C

CY27410FLTXI (7CP85400A)	4450445	611505676/79/81/82	CML-RA	500	83	0	
--------------------------	---------	--------------------	--------	-----	----	---	--

CY27410FLTXI (7CP85400A)	4450445	611505676/79/81/82	CML-RA	1000	83	0	
--------------------------	---------	--------------------	--------	------	----	---	--

STRESS: ESD-CHARGE DEVICE MODEL

CY27410FLTXI (7CP85400A)	4450445	611503788	CML-RA	500	9	0	
--------------------------	---------	-----------	--------	-----	---	---	--

CY27410FLTXI (7CP85400A)	4450445	611503788	CML-RA	750	3	0	
--------------------------	---------	-----------	--------	-----	---	---	--

CY27410FLTXI (7CP85400A)	4450445	611503788	CML-RA	1000	3	0	
--------------------------	---------	-----------	--------	------	---	---	--

CY27410FLTXI (7CP85400A)	4450445	611503788	CML-RA	1250	3	0	
--------------------------	---------	-----------	--------	------	---	---	--

CY27410FLTXI (7CP85400A)	4450445	611503788	CML-RA	1500	3	0	
--------------------------	---------	-----------	--------	------	---	---	--

CY27410FLTXI (7CP85400A)	4450445	611503788	CML-RA	2000	3	0	
--------------------------	---------	-----------	--------	------	---	---	--

STRESS: ESD-HUMAN BODY CIRCUIT PER JESD22, METHOD A114

CY27410FLTXI (7CP85400A)	4450445	611503788	CML-RA	1100	3	0	
--------------------------	---------	-----------	--------	------	---	---	--

CY27410FLTXI (7CP85400A)	4450445	611503788	CML-RA	2200	8	0	
--------------------------	---------	-----------	--------	------	---	---	--

CY27410FLTXI (7CP85400A)	4450445	611503788	CML-RA	3300	3	0	
--------------------------	---------	-----------	--------	------	---	---	--

CY27410FLTXI (7CP85400A)	4450445	611503788	CML-RA	4000	3	0	
--------------------------	---------	-----------	--------	------	---	---	--

CY27410FLTXI (7CP85400A)	4450445	611503788	CML-RA	5000	3	0	
--------------------------	---------	-----------	--------	------	---	---	--

CY27410FLTXI (7CP85400A)	4450445	611503788	CML-RA	6000	3	0	
--------------------------	---------	-----------	--------	------	---	---	--

STRESS: ESD-MACHINE MODEL

CY27410FLTXI (7CP85400A)	4450445	611505676/79/81/82	CML-RA	200	5	0	
--------------------------	---------	--------------------	--------	-----	---	---	--

STRESS: HIGH TEMP DYNAMIC OPERATING LIFE-EARLY FAILURE RATE REGULATOR ON (125, 3.96V, Vcc Max)

CY27410FLTXI (7CP85400A)	4450445	611505676/79/81/82	CML-RA	96	49	0	
--------------------------	---------	--------------------	--------	----	----	---	--

STRESS: HIGH TEMP DYNAMIC OPERATING LIFE-EARLY FAILURE RATE (125, 2.07, Vcc Max)

CY27410FLTXI (7CP85400A)	4450445	611505676/79/81/82	CML-RA	96	1607	0	
--------------------------	---------	--------------------	--------	----	------	---	--

STRESS: HIGH TEMP DYNAMIC OPERATING LIFE-LATENT FAILURE RATE (125C, 2.07, Vcc Max)

CY27410FLTXI (7CP85400A)	4450445	611505676/79/81/82	CML-RA	168	130	0	
--------------------------	---------	--------------------	--------	-----	-----	---	--

CY27410FLTXI (7CP85400A)	4450445	611505676/79/81/82	CML-RA	1000	129	0	
--------------------------	---------	--------------------	--------	------	-----	---	--



Reliability Test Data

QTP #: 145002

Device	Fab Lot #	Assy Lot #	Assy Loc	Duration	Samp	Rej	Failure Mechanism
STRESS: PRESSURE COOKER TEST (121C, 100%RH), 15 Psig, PRE COND 192 HR 30C/60%RH (MSL3)							
CY27410FLTXI (7CP85400A)	4450445	611505676/79/81/82	CML-RA	168	85	0	
CY27410FLTXI (7CP85400A)	4450445	611505676/79/81/82	CML-RA	288	85	0	
STRESS: PRE/POST LFR CRITICAL PARAMETERS							
CY27410FLTXI (7CP85400A)	4450445	611505676/79/81/82	CML-RA	0	10+2	0	
CY27410FLTXI (7CP85400A)	4450445	611505676/79/81/82	CML-RA	168	10+2	0	
CY27410FLTXI (7CP85400A)	4450445	611505676/79/81/82	CML-RA	1000	10+2	0	
STRESS: STATIC LATCH-UP (85C, +/-140mA)							
CY27410FLTXI (7CP85400A)	4450445	611503788	CML-RA	COMP	6	0	
STRESS: STATIC LATCH-UP (85C, +/-200mA)							
CY27410FLTXI (7CP85400A)	4450445	611503788	CML-RA	COMP	3	0	
STRESS: STATIC LATCH-UP (85C, +/-300mA)							
CY27410FLTXI (7CP85400A)	4450445	611503788	CML-RA	COMP	3	0	
STRESS: STATIC LATCH-UP (125C, +/-140mA)							
CY27410FLTXI (7CP85400A)	4450445	611503788	CML-RA	COMP	3	0	
STRESS: TC COND. C -65C TO 150C, PRE COND 192 HRS 30C/60%RH (MSL3)							
CY27410FLTXI (7CP85400A)	4450445	611505676/79/81/82	CML-RA	500	83	0	
CY27410FLTXI (7CP85400A)	4450445	611505676/79/81/82	CML-RA	1000	80	0	



Document History Page

Document Title: QTP#145002: Atlas Device (7C85400A) Family, S8PR2-10R Technology, Fab 4 (CMI)
Document Number: 002-10422

Rev.	ECN No.	Orig. of Change	Description of Change
**	5052710	JYF	Initial spec release.