

MC908QC16MDRE Information

Product Summary Page

- General Information
- Package Information
- Environmental and Compliance Information
- Manufacturing Information
- Ordering Information
- Product/Process Change Notice (PCN)
- Operating Characteristics
- Reliability Data Lookup

General Information

Parameter	Value
Part Number	MC908QC16MDRE
Description	8BIT MCU 16 K FLASH PBFREE
Product Line	G9T8QC63
PTI	MDBQ
Material Type	Tested Packaged Device
Life Cycle Description (code)	PRODUCT LAST SHIPMENTS
Status	No Longer Manufactured
Application/Qualification Tier	10-YEARS APPLICATION LIFE

Package Information

Parameter	Value
Package Type and Termination Count	TSSOP 28
Package Description and Mechanical Drawing	TSSOP 28 4.4*9.7*0.9P.65
Device Weight(g)	.11495
Package Material	Plastic
Mounting Style	Surface Mount
Package Length (nominal)(mm)	4.400
Package Width (nominal)(mm)	9.700
Package Thickness (nominal)(mm)	1.200
Tape & Reel	No

Environmental and Compliance Information

Parameter	Value
Pb-Free	
RoHS Compliant	
Halogen Free	Yes
Material Composition Declaration (MCD)	Download MCD Report  Download MCD Report 
RoHS Certificate of Analysis (CoA)	Download RoHS CoA Report
2nd Level Interconnect	e3
Moisture Sensitivity Level (MSL)	3
Floor Life	168 HOURS
Peak Package Body Temperature (PPT)(°C)	260
Maximum Time at Peak Temperature (s)	40
Number of Reflow Cycles	3
REACH SVHC	Freescalereach.com/Statement
UL94 (plastics flammability test)	V0: Burning stops within 10 seconds on a vertical specimen; no drips allowed

Manufacturing Information

Parameter	Value
Micron Size(?m)	.5

Ordering Information

Parameter	Value
Last Order Date	11 Oct 2013
Last Ship Date	11 Oct 2014
Minimum Package Quantity (MPQ)	50
MPQ Container	RAIL
Exempt from Minimum Delivery Value	Yes
Preferred Order Quantity (POQ)	1500
POQ Container	BOX
Leadtime (weeks)	8
Export Control Classification Number (US)	3A991
Harmonized Tariff (US) Disclaimer	8542.31.0000
CCATS Document	-
ENC Status	-
Other Trade Compliance Documents	-
Budgetary Price excluding tax(US\$) Change Currency	-
Order	

Product/Process Change Notice (PCN)

Number	Type	Title	Issue Date	Effectivity Date
15389A	Update Notification	END OF LIFE DUE TO LOW SALES	12 Oct 2012	12 Oct 2012
15389	Product Discontinuance	END OF LIFE DUE TO LOW SALES	03 Oct 2012	03 Oct 2012
15266	Product Bulletin	HC908QC16 Cold Test Elimination	22 Aug 2012	23 Aug 2012
15225	Product Bulletin	MC68HC908EY16A/MC68HC908QB8/MC68HC908QC16/MC68HC908QY4A DATASHEET UPDATE	22 Jun 2012	23 Jun 2012
14841D	Update Notification	ANNOUNCEMENT OF IMMEDIATE EFFECTIVE DATE OF TSMC2 SOURCING-HC908QC16 and HC908QYXA, QTXA (Nitron_SOG)	15 Dec 2011	16 Dec 2011
14841	Product Change Notice	Announcement of Immediate Effective Date of TSMC2 Sourcing on Select Products	22 Sep 2011	22 Sep 2011
14723	Product Change Notice	Announcement of Chandler Fab Qualification for Selected Products	08 Jun 2011	08 Jun 2011
14658	Product Change Notice	Announcement of 30 day Effective Date for Chandler Transfer Qualifications	12 May 2011	12 May 2011
13645B	Update Notification	FREESCALE 150MM SENDAI FAB CLOSURE - 85% UDRSST TO CHD PRODUCT TRANSFER NOTIFICATION	11 Jun 2010	31 Mar 2011
14104	Product Change Notice	MC68HC908QC16 BI ELIMINATION FOR IMM PARTS	12 May 2010	10 Aug 2010
13994	Product Change Notice	9S08SG8/HC908QC16/HC908QY4A KES-CHINA Final Test Site Capacity Expansion	29 Apr 2010	25 Oct 2010
14029	Product Change Notice	QC16 TSSOP PART ROOM TEST ELIMINATION	02 Apr 2010	28 Sep 2010
13645A	Update Notification	FREESCALE 150MM SENDAI FAB CLOSURE - 85% UDRSST TO CHD PRODUCT TRANSFER NOTIFICATION	26 Feb 2010	15 Mar 2011
13875	Product Change Notice	MSG Burn-In Site Expansion to KES-CHINA	29 Sep 2009	29 Sep 2009
13645	Product Change Notice	Freescalereach.com/150mm_Sendai_Fab_Closure_-_85%_UDRSST_to_CHD_Product_Transfer_Notification	24 Jul 2009	24 Jul 2009
13297	Product Change Notice	MSG Qualification of EKB Transferred Products in Sendai	17 Jun 2008	15 Sep 2008
12974	Update Notification	TSPG MCD EKB DEVICE TRANSFER UPDATE	02 Nov 2007	03 Nov 2007
12925	Device Migration	TSPG MCD EKB DEVICE TRANSFER - UPDATE A	28 Sep 2007	28 Sep 2007
12834	Product Bulletin	TSPG PRODUCT TRANSFERS FROM EKB	31 Aug 2007	01 Sep 2007
12731	Product Change Notice	TSPG MCD KLM PROBE EXPANSION	16 Jul 2007	14 Oct 2007

Operating Characteristics

Parameter	Value
Additional Features	COP KBI Low Voltage Detect POR
Bus Frequency (Max) (MHz)	8
Core: Type	HC08
GPIOs	26
Internal Flash (KB)	16
Internal RAM (KB)	0.512
Operating Frequency (Max) (MHz)	32
Operating Temperature (Min-Max) (°C)	-40 to 125
Sample Exception Availability	N
SCI	1
Serial Interface - Number of Serial Interfaces	1 1
Serial Interface - Serial Interface Type	SPI SCI
SPI	1
Supply Voltage (Min-Max) (V)	3 to 5.5
Timer Features	Input Capture Output Compare PWM
Timers - Number of Timers	1 1
Timers - Timer Channels	2 4
Timers - Timer Size (bit)	16 16

[Reliability Data Lookup](#)

Downloaded from [Arrow.com](#)