

S912XEQ384BVALR :Part Detail

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General Information

Part Number	S912XEQ384BVALR
Description	16-bit MCU, S12X core, 384KB Flash, 50MHz, -40/+105degC, Automotive Qualified, QFP 112
Material Type	Tested Packaged Device
Life Cycle Description (code)	PRODUCT MATURITY/SATURATION
Status	Active
Application/Qualification Tier	AUTO; >=10 YEARS APPLICATION LIFE

Package Information

Package Type and Termination Count	LQFP 112
Package Description and Mechanical Drawing	LQFP 112 20*20*1.4P0.65
Device Weight(g)	1.27830
Package Material	Plastic
Mounting Style	Surface Mount
Package Length (nominal)(mm)	20.000
Package Width (nominal)(mm)	20.000
Package Thickness (nominal)(mm)	1.000
Maximum Height Above Board(mm)	1.600
Tape & Reel	Yes

Environmental and Compliance Information

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

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	NXP REACH Statement
UL94 (plastics flammability test)	V0;Burning stops within 10 seconds on a vertical specimen;no drips allowed

Manufacturing Information

Micron Size(μm)	.18
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Ordering Information

Minimum Package Quantity (MPQ)	500
MPQ Container	REEL
Exempt from Minimum Delivery Value	No
Preferred Order Quantity (POQ)	500
POQ Container	BOX
Export Control Classification Number (US)	3A991A2
Harmonized Tariff (	
CCATS Document	-
ENC Status	-
Other Trade Compliance Documents	-
Budgetary Price excluding tax(US Currency	-

Order

Distributor

Similar Samples

Product/Process Change Notice (PCN)

Number	Type	Title	Issue Date	Effectivity Date
15824A	Update Notification	S12XS/XE/HY/P/XHA CU WIRE & LEAD FRAME QUAL FOR 80QFP & 100/112/144LQFP. ASE CL ASSEMBLY EXPANSION for S12XEx512/384-144LQFP Removal of S12XEx512/384 (112LQFP/144LQFP) from this Notification	22 Oct 2013	14 Jan 2014
15862A	Update Notification	TSMC 0.18UM CU & X-FLAG LEADFRAME CONV FOR KLM 112/144LQFP	21 Oct 2013	09 Mar 2014
15862	Product Change Notice		20 Sep 2013	09 Mar 2014

Operating Characteristics

ADC	12-ch. 16-bit
ADC (bit)	16
ADC (ch)	12
Additional Features	COP Low Voltage Detect POR Temperature Sensor Watchdog OSC/Timer
Ambient Operating Temperature (Min-Max) (°C)	-40 to 105
Bus Frequency (Max) (MHz)	50
CAN	2
CAN Type	CAN 2.0 A/B MSCAN12
Co Processor Frequency (Max) (MHz)	100
Co Processor Type	XGATE
Core Type	HCS12X
Device	S12XEQ
EEPROM (KB)	4
GPIOs	91
I2C	1
Internal Flash (KB)	384
Internal RAM (KB)	24
Operating Frequency (Max) (MHz)	50
PWM	8-ch. 8-bit
PWM (bit)	8
PWM (ch)	8
Sample Exception Availability	N
SCI	6
SPI	3
Supply Voltage (Min-Max) (V)	3.13 to 5.5
Timer Features	Input Capture Output Compare PWM
Timers	8-ch. 16 bit

Reliability Data Lookup

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