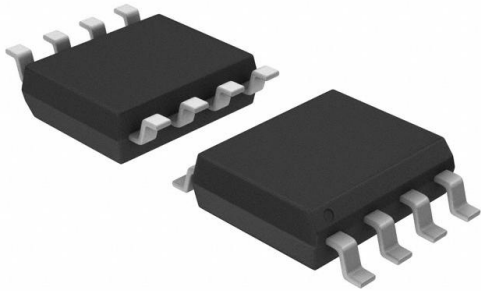


SY100EL11VZI Datasheet

www.digi-electronics.com



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	SY100EL11VZI-DG
Manufacturer	Microchip Technology
Manufacturer Product Number	SY100EL11VZI
Description	IC CLK BUFFER 1:2 8SOIC
Detailed Description	Clock Fanout Buffer (Distribution) IC 1:2 8-SOIC (0.154", 3.90mm Width)



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

SY100EL11VZI

Series:

100EL, Precision Edge®

Type:

Fanout Buffer (Distribution)

Ratio - Input:Output:

1:2

Input:

Clock

Voltage - Supply:

3V ~ 5.5V

Mounting Type:

Surface Mount

Supplier Device Package:

8-SOIC

Manufacturer:

Microchip Technology

Product Status:

Discontinued at Digi-Key

Number of Circuits:

1

Differential - Input:Output:

Yes/Yes

Output:

Clock

Operating Temperature:

-40°C ~ 85°C

Package / Case:

8-SOIC (0.154", 3.90mm Width)

Base Product Number:

SY100EL11

Environmental & Export classification

RoHS Status:

RoHS non-compliant

REACH Status:

REACH Unaffected

HTSUS:

8542.39.0001

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



SY100EL11V

5V/3.3V ECL 1:2 Differential Fanout Buffer

Features

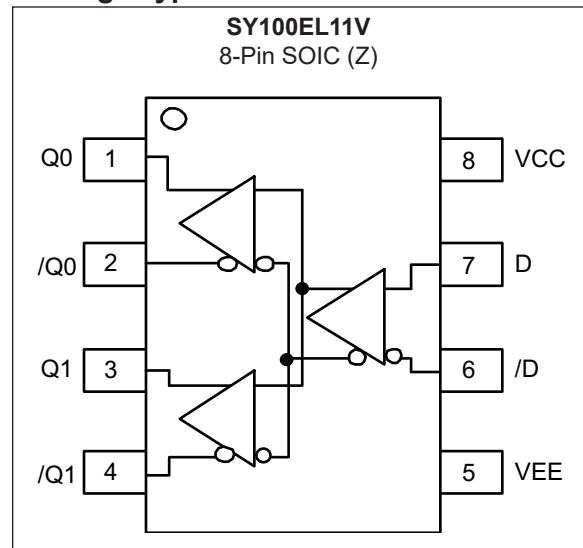
- 3.3V and 5V Power Supply Options
- 265 ps Propagation Delay (Typical)
- 5 ps Skew (Typical) Between Outputs
- High Bandwidth Output Transitions
- Internal 75 k Ω Input Pull-Down Resistors
- Replaces SY100EL11
- Improved Output Waveform Characteristics
- Available in 8-pin SOIC Package

General Description

The SY100EL11V is a 1:2 differential fanout gate. Having low within-device skews and output transition times, the EL11V is ideally suited for those applications that require the ultimate in AC performance.

The differential inputs of the EL11V employ clamping circuitry to maintain stability under open input conditions. If the inputs are left open (pulled to V_{EE}), the Q outputs will go low.

Package Type



SY100EL11V

1.0 ELECTRICAL CHARACTERISTICS

Absolute Maximum Ratings †

PECL Power Supply Voltage (V_{CC}) (Note 1)	+8V
NECL Power Supply Voltage (V_{EE}) (Note 2)	-8V
PECL Mode Input Voltage (V_{IN}) (Note 3)	+6V
NECL Mode Input Voltage (V_{IN}) (Note 4)	-6V
Continuous Output Current (I_{OUT})	50 mA
Surge Output Current (I_{OUT})	100 mA
ESD Rating (Note 5)	>1.5 kV

† **Notice:** Stresses above those listed under “Absolute Maximum ratings” may cause permanent damage to the device. Exposure to maximum rating conditions for extended periods may affect device reliability.

Note 1: $V_{EE} = 0V$

2: $V_{CC} = 0V$

3: $V_{EE} = 0V, V_{IN} \leq V_{CC}$

4: $V_{CC} = 0V, V_{IN} \geq V_{EE}$

5: Human body model, 1.5 k Ω in series with 100 pF

DC ELECTRICAL CHARACTERISTICS

Electrical Specifications PECL: $V_{CC} = 3.0V$ to $5.5V$; $V_{EE} = 0V$; $T_A = -40^{\circ}C$ to $+85^{\circ}C$, unless otherwise stated (Note 1)

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Power Supply Current	I_{EE}	—	26	31	mA	$T_A = -40^{\circ}C$ to $+25^{\circ}C$
		—	30	36		$T_A = +85^{\circ}C$
Output High Voltage (Note 2)	V_{OH}	$V_{CC}-1.085$	$V_{CC}-1.005$	$V_{CC}-0.88$	V	$T_A = -40^{\circ}C$
		$V_{CC}-1.025$	$V_{CC}-0.955$	$V_{CC}-0.88$		$T_A = 0^{\circ}C$ to $+85^{\circ}C$
Output Low Voltage (Note 2)	V_{OL}	$V_{CC}-1.830$	$V_{CC}-1.695$	$V_{CC}-1.555$	V	$T_A = -40^{\circ}C$
		$V_{CC}-1.810$	$V_{CC}-1.705$	$V_{CC}-1.620$		$T_A = 0^{\circ}C$ to $+85^{\circ}C$
Input High Voltage (Single-Ended)	V_{IH}	$V_{CC}-1.165$	—	$V_{CC}-0.880$	V	—
Input Low Voltage (Single-Ended)	V_{IL}	$V_{CC}-1.810$	—	$V_{CC}-1.475$	V	—
Common Mode Range (Note 3)	V_{IHCMR}	2.0	—	$V_{CC}-0.4$	V	$T_A = -40^{\circ}C$
		1.9	—	$V_{CC}-0.4$		$T_A = 0^{\circ}C$ to $+85^{\circ}C$
Input High Current	I_{IH}	—	—	150	μA	—
Input Low Current	I_{IL}	0.5	—	—	μA	$V_{IN} = V_{IL(MIN)}$

Note 1: Devices are designed to meet the DC specifications shown in the above table after thermal equilibration has been established. The circuit is in a test socket or mounted on a printed circuit board and transverse airflow greater than 500 lpm is maintained.

2: Outputs are terminated through a 50 Ω resistor to $V_{CC} - 2.0V$.

3: The CMR range is referenced to the most positive side of the differential input voltage. Normal operation is obtained if the high level falls within the specified range and the peak-to-peak voltage lies between 150 mV and 1V.

DC ELECTRICAL CHARACTERISTICS

Electrical Specifications NECL: $V_{EE} = -5.5V$ to $-3.0V$; $V_{CC} = 0V$; $T_A = -40^{\circ}C$ to $+85^{\circ}C$, unless otherwise stated (Note 1)

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Power Supply Current	I_{EE}	—	26	31	mA	$T_A = -40^{\circ}C$ to $+25^{\circ}C$
		—	30	36		$T_A = +85^{\circ}C$
Output High Voltage (Note 2)	V_{OH}	-1.085	-1.005	-0.88	V	$T_A = -40^{\circ}C$
		-1.025	-0.955	-0.88		$T_A = 0^{\circ}C$ to $+85^{\circ}C$
Output Low Voltage (Note 2)	V_{OL}	-1.830	-1.695	-1.555	V	$T_A = -40^{\circ}C$
		-1.810	-1.705	-1.620		$T_A = 0^{\circ}C$ to $+85^{\circ}C$
Input High Voltage (Single-Ended)	V_{IH}	-1.165	—	-0.880	V	—
Input Low Voltage (Single-Ended)	V_{IL}	-1.810	—	-1.475	V	—
Common Mode Range (Note 3)	V_{IHCMR}	$V_{EE} + 2.0$	—	-0.4	V	$T_A = -40^{\circ}C$
		$V_{EE} + 1.9$	—	-0.4		$T_A = 0^{\circ}C$ to $+85^{\circ}C$
Input High Current	I_{IH}	—	—	150	μA	—
Input Low Current	I_{IL}	0.5	—	—	μA	$V_{IN} = V_{IL(MIN)}$

- Note 1:** Devices are designed to meet the DC specifications shown in the above table after thermal equilibration has been established. The circuit is in a test socket or mounted on a printed circuit board and transverse airflow greater than 500lfpm is maintained.
- 2:** Outputs are terminated through a 50Ω resistor to $V_{CC}-2.0V$.
- 3:** The CMR range is referenced to the most positive side of the differential input voltage. Normal operation is obtained if the high level falls within the specified range and the peak-to-peak voltage lies between 150 mV and 1V.

AC ELECTRICAL CHARACTERISTICS

Electrical Characteristics: $V_{CC} = 3.0V$ to $5.5V$; $V_{EE} = 0V$ or $V_{EE} = -5.5V$ to $-3.0V$; $V_{CC} = 0V$; $T_A = -40^{\circ}C$ to $85^{\circ}C$, unless otherwise stated

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Propagation Delay D to Q	t_{PLH} t_{PHL}	135	260	385	ps	$T_A = -40^{\circ}C$
		185	260	335		$T_A = 0^{\circ}C$
		190	265	340		$T_A = +25^{\circ}C$
		215	290	365		$T_A = +85^{\circ}C$
Within-Device Skew (Note 1)	t_{SKEW}	—	5	—	ps	$T_A = -40^{\circ}C$
Duty Cycle Skew (Note 2)		—	5	20		$T_A = 0^{\circ}C$ to $+85^{\circ}C$
		—	5	—		$T_A = -40^{\circ}C$
		—	5	20		$T_A = 0^{\circ}C$ to $+85^{\circ}C$
Additive Phase Jitter (RMS)	t_{JITTER}	—	28	—	f_{SRMS}	Carrier = 622 MHz, Integration Range: 12 kHz to 20 MHz, $T_A = +25^{\circ}C$
Input Swing (Note 3)	V_{PP}	150	—	1000	mV	—
Output Rise/Fall Times Q (20% to 80%)	t_r/t_f	100	225	350	ps	—

- Note 1:** Within-device skew defined as identical transitions on similar paths through a device.
- 2:** Duty cycle skew is the difference between a t_{PLH} and t_{PHL} propagation delay through a device.
- 3:** Input swing for which AC parameters are ensured. The device has a DC gain of 40.

SY100EL11V

TEMPERATURE SPECIFICATIONS

Parameters	Sym.	Min.	Typ.	Max.	Units	Conditions
Temperature Ranges						
Operating Temperature Range	T_A	-40	—	+85	°C	—
Storage Temperature Range	T_S	-65	—	+150	°C	—
Lead Temperature	T_{LEAD}	—	—	+260	°C	Soldering, 20 sec.
Thermal Resistance						
Junction-to-Ambient	θ_{JA}	—	160	—	°C/W	Still-Air
		—	109	—		500 lfpm
Junction-to-Case	θ_{JC}	—	39	—	°C/W	—

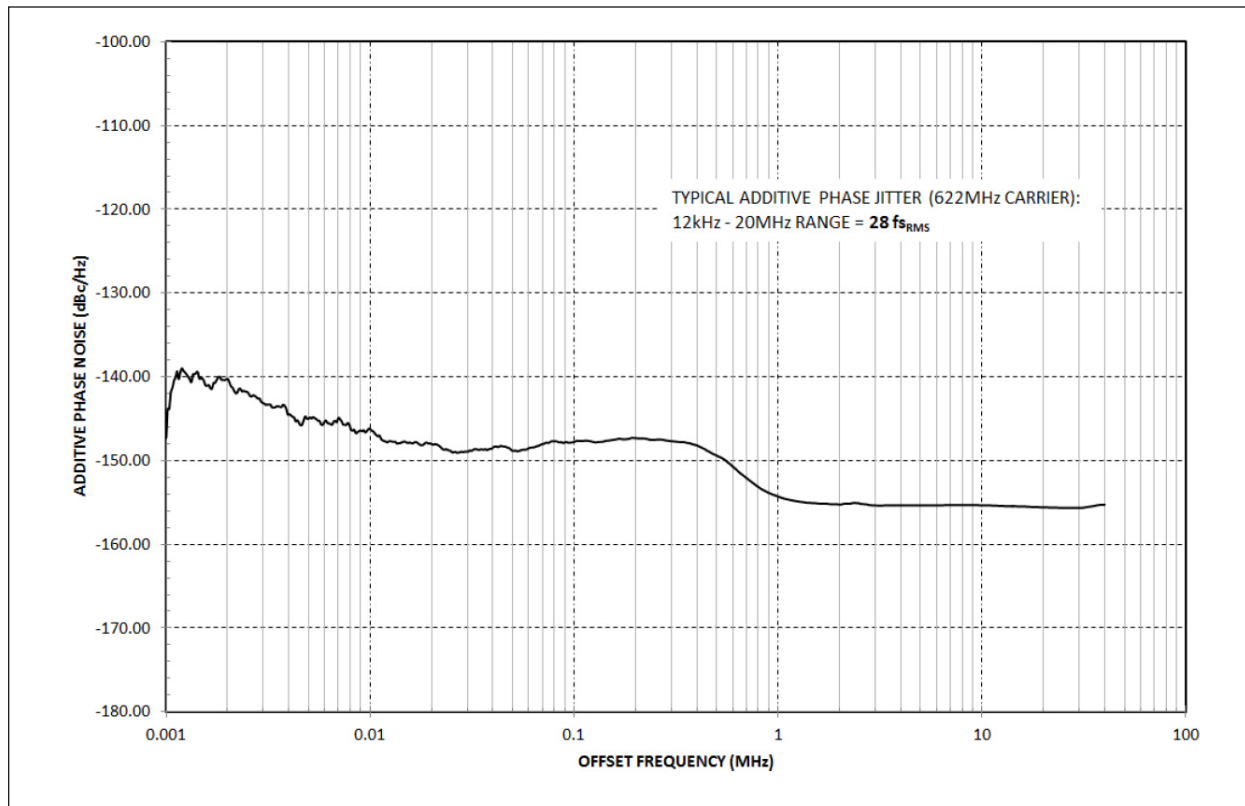
2.0 TYPICAL PERFORMANCE CURVES

FIGURE 2-1: Additive Phase Noise Plot ($V_{CC} = 3.3V$, $T_A = +25^{\circ}C$)

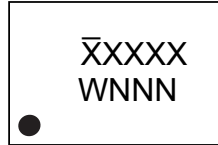
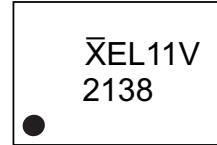
SY100EL11V

3.0 PIN DESCRIPTIONS

The descriptions of the pins are listed in [Table 3-1](#).

TABLE 3-1: PIN FUNCTION TABLE

Pin Name	Description
D	Data inputs
Q0, Q1	Data outputs
VCC	Positive power supply
VEE	Negative power supply

4.0 PACKAGING INFORMATION**4.1 Package Marking Information****8-Lead SOIC*****Example**

Legend:	XX...X	Product code or customer-specific information
	Y	Year code (last digit of calendar year)
	YY	Year code (last 2 digits of calendar year)
	WW	Week code (week of January 1 is week '01')
	NNN	Alphanumeric traceability code
	(e3)	Pb-free JEDEC® designator for Matte Tin (Sn)
	*	This package is Pb-free. The Pb-free JEDEC designator (e3) can be found on the outer packaging for this package.
	•, ▲, ▼	Pin one index is identified by a dot, delta up, or delta down (triangle mark).
Note:	In the event the full Microchip part number cannot be marked on one line, it will be carried over to the next line, thus limiting the number of available characters for customer-specific information. Package may or may not include the corporate logo.	
	Underbar (̄) and/or Overbar (̂) symbol may not be to scale.	

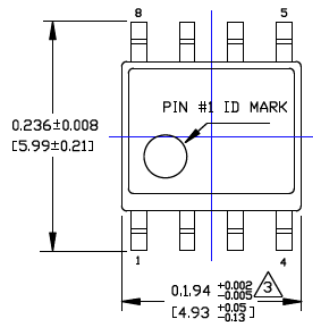
SY100EL11V

8-Lead SOIC Package Outline and Recommended Land Pattern

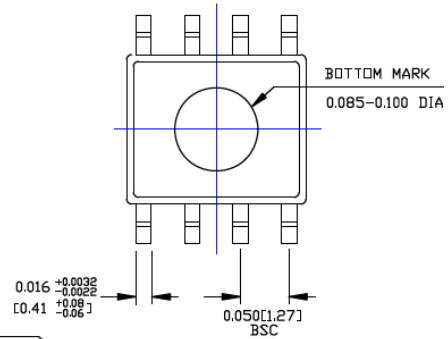
TITLE

8 LEAD SOICN PACKAGE OUTLINE & RECOMMENDED LAND PATTERN

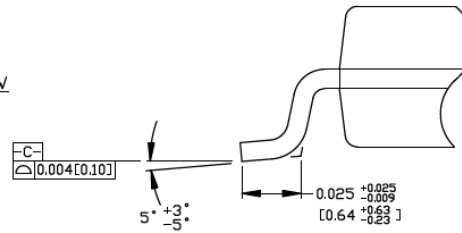
DRAWING #	SOICN-8LD-PL-1	UNIT	INCH [MM]
-----------	----------------	------	-----------



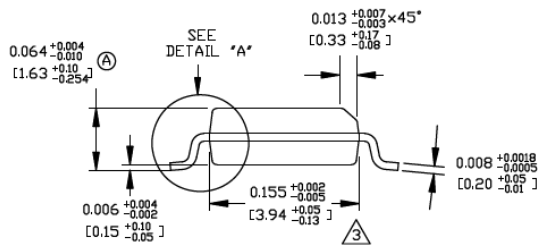
TOP VIEW



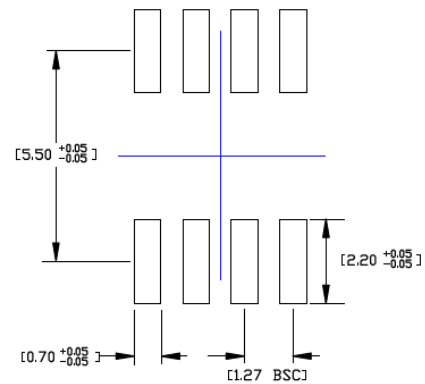
BOTTOM VIEW



DETAIL "A"



END VIEW



RECOMMENDED LAND PATTERN

NOTES:

1. DIMENSIONS ARE IN INCHES[MM].
2. CONTROLLING DIMENSION: INCHES.
3. DIMENSION DOES NOT INCLUDE MOLD FLASH OR PROTRUSIONS, EITHER OF WHICH SHALL NOT EXCEED 0.010[0.25] PER SIDE.

Note: For the most current package drawings, please see the Microchip Packaging Specification located at <http://www.microchip.com/packaging>.

APPENDIX A: REVISION HISTORY**Revision A (October 2018)**

- Converted Micrel document SY100EL11V to Microchip data sheet DS20006087A.
- Minor text changes throughout.
- Removed all reference to the EOL SY10EL11V version.

Revision B (August 2019)

- Updated minimum values for Common Mode Range voltage in PECL DC Electrical Characteristics table and NECL DC Electrical Characteristics table.
- Updated two Conditions values for t_{SKEW} in AC Electrical Characteristics table.
- Minor stylistic updates to align data sheet with current style.

SY100EL11V

NOTES:

SY100EL11V

PRODUCT IDENTIFICATION SYSTEM

To order or obtain information, e.g., on pricing or delivery, contact your local Microchip representative or sales office.

<u>PART NO.</u>	X	X	X	-XX
Device	Supply Voltage	Package	Temperature Range	Special Processing
Device:	SY100EL11: 5V/3.3V ECL 1:2 Differential Fanout Buffer			
Supply Voltage Range:	V	=	3.3V/5V	
Package:	Z	=	8-Lead SOIC	
Temperature Range:	G	=	-40°C to +85°C (Pb-Free NiPdAu)	
Special Processing:	<blank>	=	95/Tube	
	TR	=	1,000/Reel	

Examples:	
a) SY100EL11VZG:	SY100EL11, 3.3V/5V, 8-Lead SOIC, -40°C to +85°C (Pb-Free NiPdAu), 95/Tube
b) SY100EL11VZG-TR:	SY100EL11, 3.3V/5V, 8-Lead SOIC, -40°C to +85°C (Pb-Free NiPdAu), 1,000/Reel

Note 1: Tape and Reel identifier only appears in the catalog part number description. This identifier is used for ordering purposes and is not printed on the device package. Check with your Microchip Sales Office for package availability with the Tape and Reel option.

SY100EL11V

NOTES:

Note the following details of the code protection feature on Microchip devices:

- Microchip products meet the specification contained in their particular Microchip Data Sheet.
- Microchip believes that its family of products is one of the most secure families of its kind on the market today, when used in the intended manner and under normal conditions.
- There are dishonest and possibly illegal methods used to breach the code protection feature. All of these methods, to our knowledge, require using the Microchip products in a manner outside the operating specifications contained in Microchip's Data Sheets. Most likely, the person doing so is engaged in theft of intellectual property.
- Microchip is willing to work with the customer who is concerned about the integrity of their code.
- Neither Microchip nor any other semiconductor manufacturer can guarantee the security of their code. Code protection does not mean that we are guaranteeing the product as “unbreakable.”

Code protection is constantly evolving. We at Microchip are committed to continuously improving the code protection features of our products. Attempts to break Microchip's code protection feature may be a violation of the Digital Millennium Copyright Act. If such acts allow unauthorized access to your software or other copyrighted work, you may have a right to sue for relief under that Act.

Information contained in this publication regarding device applications and the like is provided only for your convenience and may be superseded by updates. It is your responsibility to ensure that your application meets with your specifications. MICROCHIP MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND WHETHER EXPRESS OR IMPLIED, WRITTEN OR ORAL, STATUTORY OR OTHERWISE, RELATED TO THE INFORMATION, INCLUDING BUT NOT LIMITED TO ITS CONDITION, QUALITY, PERFORMANCE, MERCHANTABILITY OR FITNESS FOR PURPOSE. Microchip disclaims all liability arising from this information and its use. Use of Microchip devices in life support and/or safety applications is entirely at the buyer's risk, and the buyer agrees to defend, indemnify and hold harmless Microchip from any and all damages, claims, suits, or expenses resulting from such use. No licenses are conveyed, implicitly or otherwise, under any Microchip intellectual property rights unless otherwise stated.

Trademarks

The Microchip name and logo, the Microchip logo, Adaptec, AnyRate, AVR, AVR logo, AVR Freaks, BesTime, BitCloud, chipKIT, chipKIT logo, CryptoMemory, CryptoRF, dsPIC, FlashFlex, flexPWR, HELDO, IGLOO, JukeBlox, KeeLoq, Klear, LANCheck, LinkMD, maXStylus, maXTouch, MediaLB, megaAVR, Microsemi, Microsemi logo, MOST, MOST logo, MPLAB, OptoLyzer, PackeTime, PIC, picoPower, PICSTART, PIC32 logo, PolarFire, Prochip Designer, QTouch, SAM-BA, SenGenuity, SpyNIC, SST, SST Logo, SuperFlash, Symmetricom, SyncServer, Tachyon, TempTracker, TimeSource, tinyAVR, UNI/O, Vectron, and XMEGA are registered trademarks of Microchip Technology Incorporated in the U.S.A. and other countries.

APT, ClockWorks, The Embedded Control Solutions Company, EtherSynch, FlashTec, Hyper Speed Control, HyperLight Load, IntelliMOS, Libero, motorBench, mTouch, Powermite 3, Precision Edge, ProASIC, ProASIC Plus, ProASIC Plus logo, Quiet-Wire, SmartFusion, SyncWorld, Temux, TimeCesium, TimeHub, TimePictra, TimeProvider, Vite, WinPath, and ZL are registered trademarks of Microchip Technology Incorporated in the U.S.A.

Adjacent Key Suppression, AKS, Analog-for-the-Digital Age, Any Capacitor, AnyIn, AnyOut, BlueSky, BodyCom, CodeGuard, CryptoAuthentication, CryptoAutomotive, CryptoCompanion, CryptoController, dsPICDEM, dsPICDEM.net, Dynamic Average Matching, DAM, ECAN, EtherGREEN, In-Circuit Serial Programming, ICSP, INICnet, Inter-Chip Connectivity, JitterBlocker, KlearNet, KlearNet logo, memBrain, Mindi, MiWi, MPASM, MPF, MPLAB Certified logo, MPLIB, MPLINK, MultiTRAK, NetDetach, Omniscient Code Generation, PICDEM, PICDEM.net, PICKit, PICtail, PowerSmart, PureSilicon, QMatrix, REAL ICE, Ripple Blocker, SAM-ICE, Serial Quad I/O, SMART-I.S., SQI, SuperSwitcher, SuperSwitcher II, Total Endurance, TSHARC, USBCheck, VariSense, ViewSpan, WiperLock, Wireless DNA, and ZENA are trademarks of Microchip Technology Incorporated in the U.S.A. and other countries.

SQTP is a service mark of Microchip Technology Incorporated in the U.S.A.

The Adaptec logo, Frequency on Demand, Silicon Storage Technology, and Symmcom are registered trademarks of Microchip Technology Inc. in other countries.

GestIC is a registered trademark of Microchip Technology Germany II GmbH & Co. KG, a subsidiary of Microchip Technology Inc., in other countries.

All other trademarks mentioned herein are property of their respective companies.

© 2018-2019, Microchip Technology Incorporated, All Rights Reserved.

ISBN: 978-1-5224-4880-8

For information regarding Microchip's Quality Management Systems, please visit www.microchip.com/quality.



MICROCHIP

Worldwide Sales and Service

AMERICAS

Corporate Office
2355 West Chandler Blvd.
Chandler, AZ 85224-6199
Tel: 480-792-7200
Fax: 480-792-7277
Technical Support:
<http://www.microchip.com/support>
Web Address:
www.microchip.com

Atlanta

Duluth, GA
Tel: 678-957-9614
Fax: 678-957-1455

Austin, TX

Tel: 512-257-3370

Boston

Westborough, MA
Tel: 774-760-0087
Fax: 774-760-0088

Chicago

Itasca, IL
Tel: 630-285-0071
Fax: 630-285-0075

Dallas

Addison, TX
Tel: 972-818-7423
Fax: 972-818-2924

Detroit

Novi, MI
Tel: 248-848-4000

Houston, TX

Tel: 281-894-5983

Indianapolis

Noblesville, IN
Tel: 317-773-8323
Fax: 317-773-5453
Tel: 317-536-2380

Los Angeles

Mission Viejo, CA
Tel: 949-462-9523
Fax: 949-462-9608
Tel: 951-273-7800

Raleigh, NC

Tel: 919-844-7510

New York, NY

Tel: 631-435-6000

San Jose, CA

Tel: 408-735-9110
Tel: 408-436-4270

Canada - Toronto

Tel: 905-695-1980
Fax: 905-695-2078

ASIA/PACIFIC

Australia - Sydney

Tel: 61-2-9868-6733

China - Beijing

Tel: 86-10-8569-7000

China - Chengdu

Tel: 86-28-8665-5511

China - Chongqing

Tel: 86-23-8980-9588

China - Dongguan

Tel: 86-769-8702-9880

China - Guangzhou

Tel: 86-20-8755-8029

China - Hangzhou

Tel: 86-571-8792-8115

China - Hong Kong SAR

Tel: 852-2943-5100

China - Nanjing

Tel: 86-25-8473-2460

China - Qingdao

Tel: 86-532-8502-7355

China - Shanghai

Tel: 86-21-3326-8000

China - Shenyang

Tel: 86-24-2334-2829

China - Shenzhen

Tel: 86-755-8864-2200

China - Suzhou

Tel: 86-186-6233-1526

China - Wuhan

Tel: 86-27-5980-5300

China - Xian

Tel: 86-29-8833-7252

China - Xiamen

Tel: 86-592-2388138

China - Zhuhai

Tel: 86-756-3210040

ASIA/PACIFIC

India - Bangalore

Tel: 91-80-3090-4444

India - New Delhi

Tel: 91-11-4160-8631

India - Pune

Tel: 91-20-4121-0141

Japan - Osaka

Tel: 81-6-6152-7160

Japan - Tokyo

Tel: 81-3-6880-3770

Korea - Daegu

Tel: 82-53-744-4301

Korea - Seoul

Tel: 82-2-554-7200

Malaysia - Kuala Lumpur

Tel: 60-3-7651-7906

Malaysia - Penang

Tel: 60-4-227-8870

Philippines - Manila

Tel: 63-2-634-9065

Singapore

Tel: 65-6334-8870

Taiwan - Hsin Chu

Tel: 886-3-577-8366

Taiwan - Kaohsiung

Tel: 886-7-213-7830

Taiwan - Taipei

Tel: 886-2-2508-8600

Thailand - Bangkok

Tel: 66-2-694-1351

Vietnam - Ho Chi Minh

Tel: 84-28-5448-2100

EUROPE

Austria - Wels

Tel: 43-7242-2244-39
Fax: 43-7242-2244-393

Denmark - Copenhagen

Tel: 45-4450-2828
Fax: 45-4485-2829

Finland - Espoo

Tel: 358-9-4520-820

France - Paris

Tel: 33-1-69-53-63-20
Fax: 33-1-69-30-90-79

Germany - Garching

Tel: 49-8931-9700

Germany - Haan

Tel: 49-2129-3766400

Germany - Heilbronn

Tel: 49-7131-72400

Germany - Karlsruhe

Tel: 49-721-625370

Germany - Munich

Tel: 49-89-627-144-0
Fax: 49-89-627-144-44

Germany - Rosenheim

Tel: 49-8031-354-560

Israel - Ra'anana

Tel: 972-9-744-7705

Italy - Milan

Tel: 39-0331-742611
Fax: 39-0331-466781

Italy - Padova

Tel: 39-049-7625286

Netherlands - Drunen

Tel: 31-416-690399
Fax: 31-416-690340

Norway - Trondheim

Tel: 47-7288-4388

Poland - Warsaw

Tel: 48-22-3325737

Romania - Bucharest

Tel: 40-21-407-87-50

Spain - Madrid

Tel: 34-91-708-08-90
Fax: 34-91-708-08-91

Sweden - Gothenberg

Tel: 46-31-704-60-40

Sweden - Stockholm

Tel: 46-8-5090-4654

UK - Wokingham

Tel: 44-118-921-5800
Fax: 44-118-921-5820

OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we stricly control the quality of products and services. Welcome your RFQ to

Email: Info@DiGi-Electronics.com



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.