# **Device Information**

## **Design Support**

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### **Technical Documentation**

Search for documentation by device or doc number

Datasheets Application Notes Technical Briefs Tech Articles/Whitepapers Other Related Documents Product Selection Guide Semiconductor Terminology

#### Purchasing

Analog Glossary

Product Status Product Cross Reference Pricing/Leadtime Packaging Information Order Samples Quality and Reliability Order/Shipment Status Distributor Stock Check

## 82C54

Printer Friendly Version

#### **CMOS Programmable Interval Timer**

DS Datasheet &	<u>Description</u>	<u>Key</u>	Parametric Parametric	Related
Related Docs		<u>Features</u>	<u>Data</u>	<u>Devices</u>

## **Ordering Information**

# RoHS/Pb-Free/Green Device

Part No.	Status	Temp.	Package	MSL	Price US \$		
84065013A	Active	Mil	28 Ld CLCC	N/A		Buy	
8406501JA	Active	Mil	24 Ld CerDIP	N/A		Buy	
84065023A	Active	Mil	28 Ld CLCC	N/A		Buy	
CP82C54	Active	Comm	24 Ld PDIP	N/A		Buy	Sample
CP82C54-10	Active	Comm	24 Ld PDIP	N/A		Buy	
CP82C54-10Z	Active	Comm	24 Ld PDIP	N/A		Buy	Sample
CP82C54-12	Active	Comm	24 Ld PDIP	N/A		Buy	
CP82C54-12Z	Active	Comm	24 Ld PDIP	N/A		Buy	Sample
CP82C54Z 🔒	Active	Comm	24 Ld PDIP	N/A		Buy	Sample
CS82C54	Active	Comm	28 Ld PLCC	1		Buy	Sample
CS82C54-10	Active	Comm	28 Ld PLCC	1		Buy	Sample
CS82C54-1096	Active	Comm	28 Ld PLCC <u>T+R</u>	1		Buy	
CS82C54-10Z	Active	Comm	28 Ld PLCC	3		Buy	Sample
CS82C54-10Z96	Active	Comm	28 Ld PLCC <u>T+R</u>	3		Buy	
CS82C54-12	Active	Comm	28 Ld PLCC	1		Buy	
CS82C54-12Z	Active	Comm	28 Ld PLCC	3		Buy	Sample
CS82C54-12Z96	Active	Comm	28 Ld PLCC <u>T+R</u>	3		Buy	
CS82C5496	Active	Comm	28 Ld PLCC <u>T+R</u>	1		Buy	
CS82C54Z 🔒	Active	Comm	28 Ld PLCC	3		Buy	Sample
CS82C54Z96 🗪	Active	Comm	28 Ld PLCC <u>T+R</u>	3		Buy	
ID82C54	Active	Ind	24 Ld CerDIP	N/A		Buy	Sample
IP82C54	Active	Ind	24 Ld PDIP	N/A		Buy	
IP82C54-10	Active	Ind	24 Ld PDIP	N/A		Buy	
IP82C54-10Z	Active	Ind	24 Ld PDIP	N/A		Buy	Sample
	Active	Ind	24 Ld PDIP	N/A			

IP82C54Z 🔒					Buy	Sample
IS82C54	Active	Ind	28 Ld PLCC	1	Buy	
IS82C54-10	Active	Ind	28 Ld PLCC	1	Buy	
IS82C54-1096	Active	Ind	28 Ld PLCC T+R	1	Buy	
IS82C54-10Z	Active	Ind	28 Ld PLCC	3	Buy	Sample
IS82C5496	Active	Ind	28 Ld PLCC <u>T+R</u>	1	Buy	
IS82C54Z 📴	Active	Ind	28 Ld PLCC	3	Buy	Sample
MD82C54/B	Active	Mil	24 Ld CerDIP	N/A	Buy	

The price listed is the manufacturer's suggested retail price for quantities between 100 and 999 units. However, prices in today's market are fluid and may change without notice.

MSL = Moisture Sensitivity Level - per IPC/JEDEC J-STD-020

SMD = Standard Microcircuit Drawing

# Description

The Intersil 82C54 is a high performance CMOS Programmable Interval Timer manufactured using an advanced 2 micron CMOS process.

The 82C54 has three independently programmable and functional 16-bit counters, each capable of handling clock input frequencies of up to 8MHz (82C54) or 10MHz (82C54-10) or 12MHz (82C54-12).

The high speed and industry standard configuration of the 82C54 make it compatible with the Intersil 80C86, 80C88, and 80C286 CMOS microprocessors along with many other industry standard processors. Six programmable timer modes allow the 82C54 to be used as an event counter, elapsed time indicator, programmable one-shot, and many other applications. Static CMOS circuit design insures low power operation.

The Intersil advanced CMOS process results in a significant reduction in power with performance equal to or greater than existing equivalent products.

# **Key Features**

- 8MHz to 12MHz Clock Input Frequency
- Compatible with NMOS 8254
  - Enhanced Version of NMOS 8253
- Three Independent 16-Bit Counters
- Six Programmable Counter Modes
- Status Read Back Command
- Binary or BCD Counting
- Fully TTL Compatible
- Single 5V Power Supply
- Low Power
  - ICCSB 10µA
  - ICCOP 10mA at 8MHz
- **Operating Temperature Ranges** 
  - CX82C54 0°C to +70°C
  - IX82C54 -40°C to +85°C
  - MD82C54 -55°C to +125°C
- Pb-Free Plus Anneal Available (RoHS Compliant)

#### **Related Documentation**

Datasheet(s):

CMOS Programmable Interval Timer

Military SMD(s):

Radiation Hardened CMOS Programmable Interval Timer

# Parametric Data

8MHz to 12MHz Clock Input Frequency

Features • Compatible with NMOS 8254 - Enhanced Version of NMOS 8253





<u>82C37A</u>	CMOS High Performance Programmable DMA Controller
82C55A	CMOS Programmable Peripheral Interface

82C59A CMOS Priority Interrupt Controller
 82C82 CMOS Octal Latching Bus Driver
 82C84A CMOS Clock Generator Driver
 82C86 CMOS Octal Bus Transceiver

82C88 CMOS Bus Controller
82C89 CMOS Bus Arbiter

MQ82C55A CMOS Programmable Peripheral Interface

MS82C55A CMOS Programmable Peripheral Interface

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