

## Standard Timer Single -20°C 85°C 8-Pin SOIC N

Manufacturer:	Maxim Integrated
Package/Case:	SOP8
Product Type:	Clock & Timer ICs
RoHS:	RoHS Compliant/Lead free RoHS
Lifecycle:	Active



# **General Description**

The ICM7555 and ICM7556 are CMOS RC timers providing significantly improved performance over the standard SE/NE 555/556 and 355 timers, while at the same time being direct replacements for those devices in most applications. Improved parameters include low supply current, wide operating supply voltage range, low Threshold, Trigger and Reset currents, no crowbarring of the supply current during output transitions, higher frequency performance and no requirement to decouple Control Voltage for stable operation. Specifically, the ICM7555 and ICM7556 are stable controllers capable of producing accurate time delays or frequencies. The ICM7556 is a dual ICM7555, with the two timers operating independently of each other, sharing only V+ and GND. In the one shot mode, the pulse width of each circuit is precisely controlled by one external resistor and capacitor. For astable operation as an oscillator, the free running frequency and the duty cycle are both accurately controlled by two external resistors and one capacitor. Unlike the regular bipolar SE/NE 555/556 devices, the Control Voltage terminal need not be decoupled with a capacitor. The circuits are triggered and reset on falling (negative) waveforms, and the output inverter can source or sink currents large enough to drive TTL loads, or provide minimal offsets to drive CMOS loads.

## **Key Features**

Exact equivalent in most cases for SE/NE 555/556 or TLC555/556 Low supply current ICM7555: 60µA ICM7556: 120µA Extremely low input currents: 20pA High speed operation: 1MHz Guaranteed supply voltage range: 2V to 18V Temperature stability: 0.005%/°C at +25°C Normal reset function - no crowbarring of supply during output transition Can be used with higher impedance timing elements than regular 555/556 for longer RC time constants Timing from microseconds through hours Operates in both astable and monostable modes Adjustable duty cycle High output source/sink driver can drive TTL/CMOS Outputs have very low offsets, HIGH and LOW Pb-free (RoHS Compliant)

## **Recommended For You**

ICM7555ISA	ICM75561PD	ICM7555IPA+
Maxim Integrated	Maxim Integrated	Maxim Integrated
SOP-8	DIP	DIP
ICM72401PE+	ICM75561PD+	ICM7556ISD+
Maxim Integrated	Maxim Integrated	Maxim Integrated
DIP16	DIP14	SOP-14
ICM7555ESA-T	ICM7242IPA+	ICM7555ISA+T
Maxim Integrated	Maxim Integrated	Maxim Integrated
SOIC-8	DIP-8	SOP-8

### ICM7240IWE+

Maxim Integrated

SOP16

#### ICM7250IPE+

Maxim Integrated

Correctoriginal

#### ICM7555MJA/HR

Maxim Integrated

SMDSMT

# ICM7555ITV

Maxim Integrated CAN8

### ICM7555ESA+

Maxim Integrated

SOP8

#### DS1023-500

Maxim Integrated SOP16