

Device Information

HCS163MS

[Printer Friendly Version](#)**Counter, Synchronous, Presetable, Look Ahead Carry, Rad-Hard, High-Speed, CMOS, Logic**[Get Datasheet](#)**Ordering Information**

Part No.	Status	Temp.	Package	MSL	SMD	Price US \$	
HCS163DMSR	Active	-	16 Ld SBDIP	N/A	5962R9580701VEC	Contact Us	Buy
HCS163KMSR	Active	-	FlatPack	N/A	5962R9580701VXC	Contact Us	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 HCS163MS is a Radiation Hardened synchronous presetable binary counter that features lookahead carry logic for use in high speed counting applications. Counting and parallel load, and presetting are all accomplished synchronously with the positive transition of the clock.

The HCS163MS utilizes advanced CMOS/SOS technology to achieve high-speed operation. This device is a member of radiation hardened, high-speed, CMOS/SOS Logic Family.

The HCS163MS is supplied in a 16 lead Ceramic flatpack (K suffix) or a SBDIP Package (D suffix).

Key Features

- 3 Micron Radiation Hardened CMOS SOS
- Total Dose 200K RAD (Si)
- SEP Effective LET No Upsets: >100 MEV-cm²/mg
- Single Event Upset (SEU) Immunity < 2 x 10⁻⁹ Errors/Bit-Day (Typ)
- Dose Rate Survivability: >1 x 10¹² RAD (Si)/s
- Dose Rate Upset: >10¹⁰ RAD (Si)/s 20ns Pulse
- Latch-Up Free Under Any Conditions
- Military Temperature Range: -55°C to +125°C
- Significant Power Reduction Compared to LSTTL ICs
- DC Operating Voltage Range: 4.5V to 5.5V
- Input Logic Levels
 - VIL = 30% of VCC
 - VIH = 70% of VCC
- Input Current Levels I_{id} 5μA at VOL, VOH

Related Documentation



Datasheet(s):

- [Radiation Hardened Synchronous Presettable Counter](#)



Military SMD(s):

- [Radiation Hardened Synchronous Presettable Counter](#)

Parametric Data

RH Level

200

Related Devices[Parametric Table](#)[CD40193BMS](#)

Up/Down Counter, Presettable, Dual Clock, Reset, Binary Type, Rad-Hard, CMOS, Logic

[CD4020BMS](#)

Counter/Divider, 14-Stage, Binary Ripple-Carry, Rad-Hard, CMOS, Logic

[CD4024BMS](#)

Counter/Divider, 7-Stage, Binary Ripple-Carry, Rad-Hard, CMOS, Logic

[CD4029BMS](#)

Counter, Up/Down, Presettable, Rad-Hard, CMOS, Logic

[CD4040BMS](#)

Counter/Divider, 12-Stage, Binary Ripple-Carry, Rad-Hard, CMOS, Logic

[CD4060BMS](#)

Counter/Divider, 14-Stage, Binary Ripple-Carry, Rad-Hard, CMOS, Logic

[CD4520BMS](#)

Counter, Up, Binary, Dual, Rad-Hard, CMOS, Logic

[HCS161MS](#)

Counter, Synchronous, 4-Input Binary, Asynchronous Reset, Look Ahead Carry, Rad-Hard, High-Speed, CMOS, Logic

[HCTS191MS](#)

Counter, Up/Down, Synchronous, TTL Inputs, Rad-Hard, High-Speed, CMOS, Logic

[HCTS193MS](#)

Counter, 4-Bit, Up/Down, Synchronous, TTL Inputs, Rad-Hard, High-Speed, CMOS, Logic

[HCTS393MS](#)

Counter, Binary, 4-Stage, TTL Inputs, Dual, Rad-Hard, High-Speed, CMOS, Logic


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