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### Device Information

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### ICM7243

Printer Friendly Version

8-Character, Microprocessor-Compatible, LED Display Decoder Driver

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

#### **Ordering Information**



Part No.	Status	Temp.	Package	MSL			
ICM7243AIM44Z	Active	Ind	44 Ld MQFP	3	8.83	Buy	Sample
ICM7243AIM44ZT	Active	Ind	44 Ld MQFP T+R	3	8.83	Buy	
ICM7243BIPL	Active	Ind	40 Ld PDIP	N/A	8.83	Buy	Sample
ICM7243BIPLZ	Active	Ind	40 Ld PDIP	N/A	8.83	Buy	Sample
ICM7243ACM44Z	Coming Soon	Comm	44 Ld MQFP				
ICM7243ACM44ZT	Coming Soon	Comm	44 Ld MQFP T+R				
ICM7243AIPLZ	Coming Soon	Ind	40 Ld PDIP				

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 ICM7243 is an 8-character, alphanumeric display driver and controller which provides all the circuitry required to interface a microprocessor or digital system to a 14-segment or 16-segment display. It is primarily intended for use in microprocessor systems, where it minimizes hardware and software overhead. Incorporated on-chip are a 64-character ASCII decoder, 8 x 6 memory, high power character and segment drivers, and the multiplex scan circuitry.

6-bit ASCII data to be displayed is written into the memory directly from the microprocessor data bus. Data location depends upon the selection of either Sequential (MODE = 1) or Random access mode (MODE = 0). In the Sequential Access mode the first entry is stored in the lowest location and displayed in the "left-most" character position. Each subsequent entry is automatically stored in the next higher location and displayed to the immediate "right" of the previous entry. A DISPlay FULL signal is provided after 8 entries; this signal can be used for cascading devices together. A CLeaR pin is provided to clear the memory and reset the location counter. The Random Access mode allows the processor to select the memory address and display digit for each input word.

The character multiplex scan runs whenever data is not being entered. It scans the memory and CHARacter drivers, and ensures that the decoding from memory to display is done in the proper sequence. Intercharacter blanking is provided to avoid display ghosting.

## **Key Features**

- 14-Segment and 16-Segment Fonts with Decimal Point
- Mask Programmable for Other Font-Sets Up to 64 Characters
- Microprocessor Compatible

- Directly Drives LED Common Cathode Displays
- Cascadable Without Additional Hardware
- Standby Feature Turns Display Off; Puts Chip in Low Power Mode
- Sequential Entry or Random Entry of Data Into Display
- Single +5V Operation
- Character and Segment Drivers, All MUX Scan Circuitry, 8 x 6 Static Memory and 64-
- Character ASCII Font Generator Included On-Chip
- Pb-Free Plus Anneal Available (RoHS Compliant)

#### **Related Documentation**

- Datasheet(s):
  - 8-Character, Microprocessor-Compatible, LED Display Decoder Driver
- Technical Homepage:
  - Display Products

PΤ	Parametric	Data

Alphanumeric?	Yes
# of Digits	8
Display Type	LED, CC
Multiplexed?	Yes
Font	ASCII
Interface	BIT PAR.,DIGIT SER.,RANDOM
Cycle Time (ns)	250

### Related Devices

Parametric Table

ICM7211A 4-Digit, LCD Display Driver
ICM7211AM 4-Digit, LCD Display Driver

ICM7218 8-Digit LED Microprocessor-Compatible Multiplexed Display Decoder Driver

ICM7228 8-Digit, Microprocessor-Compatible, LED Display Decoder Driver

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