HARRIS SEMICONDUCTOR ICM7231, ICM7232

August 1997

Complete data sheet available via web, Harris' home page: http://www.semi.harris.com or via Harris AnswerFAX, see Section 17

Numeric/Alphanumeric Triplexed LCD Display Drivers

Features

- **ICM7231 Drives 8 Digits of 7 Segments with Two Independent Annunciators Per Digit Address and Data Input in Parallel Format**
- **ICM7232 Drives 10 Digits of 7 Segments with Two Independent Annunciators Per Digit Address and Data Input in Serial Format**
- **All Signals Required to Drive Rows and Columns of Triplexed LCD Display are Provided**
- **Display Voltage Independent of Power Supply**
- **On-Chip Oscillator Provides All Display Timing**
- **Total Power Consumption Typically 200μW, Maximum 500μW at 5V**
- **Low-Power Shutdown Mode Retains Data With 5μW Typical Power Consumption at 5V, 1μW at 2V**
- **Direct Interface to High-Speed Microprocessors**

Description

The ICM7231 and ICM7232 family of integrated circuits are designed to generate the voltage levels and switching waveforms required to drive triplexed liquid-crystal displays. These chips also include input buffer and digit address decoding circuitry allowing six bits of input data to be decoded into 64 independent combinations of the output segments of the selected digit.

The family is designed to interface to modern high-performance microprocessors and microcomputers and ease system requirements for ROM space and CPU time needed to service a display.

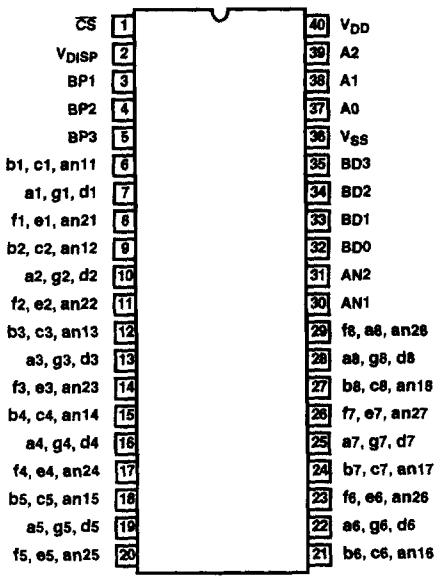
Ordering Information

PART NUMBER	TEMP. RANGE (°C)	PACKAGE	NUMBER OF DIGITS	INPUT FORMAT	PKG. NO.
ICM7231BFIJL	-25 to 85	40 Ld CERDIP	8 Digit	Parallel	F40.6
ICM7231BFIPL	-25 to 85	40 Ld PDIP	8 Digit	Parallel	E40.6
ICM7232BFIPL	-25 to 85	40 Ld PDIP	10 Digit	Serial	E40.6
ICM7232CRIPL	-25 to 85	40 Ld PDIP	10 Digit	Serial	E40.6

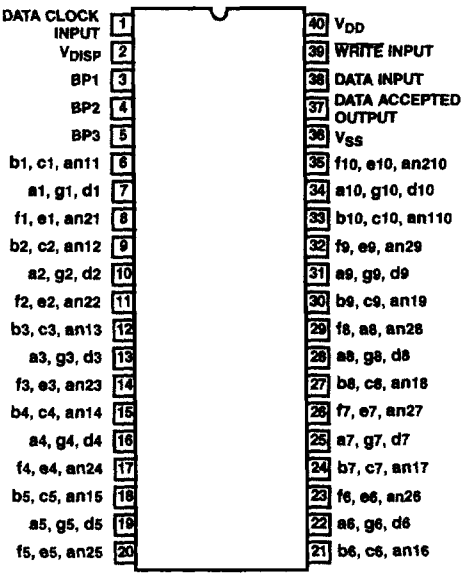
NOTE:
All versions intended for triplexed LCD displays.

Pinouts

ICM7231BF
(PDIP, CERDIP)
TOP VIEW



ICM7232AF, BF
(PDIP, CERDIP)
TOP VIEW



ICM7232CR
(PDIP)
TOP VIEW