

## ICs FOR RESET (CONTINUED)

Type No.	Function	Typical electrical characteristics		Package outline	Remarks
		V <sub>CC</sub> (V)	I <sub>CC</sub> (mA)		
Ⓐ M62009L/P/FP	Low Power 2-Input Microcomputer System Reset for Back-up mode	0 to 8	0.01 or less	8P4/8P2S/ 8P5	Correspond to car audio Open drain output
Ⓐ M62021L/P/FP	System Reset with Switch for Memory Back-up	0 to 7	7.5	8P5/8P4/ 8P2S	Detection voltage 4.40V 2-system output Built-in back-up current conversion switch
Ⓐ M62023L/P/FP	★★ System Reset with Switch for Memory Back-up	0 to 7	6.5	8P5/8P4/ 8P2S	Detection voltage 2.57V 2-system output Built-in back-up current conversion switch
Ⓐ M62022L/FP	System Reset	2 to 17	0.4	5P5/8P2S	Detection voltage 4.45V External delay capacity
Ⓐ M62030FP	★★ System Reset	2 to 10	0.7	8P2S	Detection voltage 1.25/4.2V Built-in delay circuit
Ⓐ M62050P/FP	★ Watch Dog Timer for 3V Power Supply System, 2 System Voltage Detect	2 to 4	0.6	8P4/8P2S	Compatible with 3V power supply systems 2 system voltage detect
Ⓐ M62055FP	★★ Watch Dog Timer for 3V Power Supply System	3.5 to 13	0.8	8P2S	3V power supply system Built-in 3V power supply

Ⓐ : Dig. Ana. Interface

## 12 DIGITAL ASSPs

### PERIPHERAL IC FOR MICROCOMPUTER AND MEMORY

Function	Type No.	Package Outline	Water Process	Features	Usage/Field
5x5 dot VFD controller with serial bus	M66002SP/FP	52P4B/52P2G-A	CMOS	<ul style="list-style-type: none"> <li>● Compatible with 16-digit, 26-segment VFD</li> <li>● Includes 80-character ROM</li> <li>● Includes 4-character RAM</li> <li>● Variable number of display digits (9 to 16 digits)</li> </ul>	<ul style="list-style-type: none"> <li>● VCR, CD, OA equipments</li> <li>● General panel display using VFD</li> </ul>
5x7 dot VFD controller with serial bus	M66004SP/FP	64P4B/64P2G-A	CMOS	<ul style="list-style-type: none"> <li>● Compatible with 16-digit, 36-segment VFD</li> <li>● Includes 180-character ROM ("kana" possible)</li> <li>● Includes 16-character RAM</li> <li>● Variable number of display digits (9 to 16 digits)</li> </ul>	
12-bit I/O expander with serial bus	M66006P/FP	20P4/20P2N-A	CMOS	<ul style="list-style-type: none"> <li>● Has 12-bit data serial-in, parallel-out and parallel-in, serial-out conversion function</li> <li>● Decreased signal lines by the use of a serial bus</li> </ul>	<ul style="list-style-type: none"> <li>● Inter-PCB communication of VCR, AV and OA equipments</li> <li>● Expansion of a microcomputer I/O port</li> </ul>
12-bit I/O expander with serial bus	M66007P/FP	16P4/16P2N-A	CMOS	<ul style="list-style-type: none"> <li>● Has 12-bit data parallel-in, serial-out function</li> <li>● Decreased signal lines by the use of a serial bus</li> </ul>	
16-bit I/O expander with serial bus	M66008P/FP	24P4D/24P2N-B	CMOS	<ul style="list-style-type: none"> <li>● Has 16-bit data serial-in, parallel-out and parallel-in serial-out conversion function</li> <li>● Decreased signal lines by the use of a serial bus</li> </ul>	
8-bit I/O expander with address input	M66009FP	20P2N-A	CMOS	<ul style="list-style-type: none"> <li>● With 5-bit address input</li> <li>● Has 8-bit data serial-in, parallel-out and parallel-in, serial-out conversion function</li> <li>● Use of a serial bus</li> </ul>	
24-bit I/O expander with serial bus	M66010FP/GP	32P2W-A/32P2U-B	CMOS	<ul style="list-style-type: none"> <li>● Has 24-bit data serial-in, parallel-out and parallel-in, serial-out conversion function</li> <li>● Decreased signal lines by the use of a serial bus</li> </ul>	
Serial bus controller	M66011FP	24P2N-B	CMOS	<ul style="list-style-type: none"> <li>● General-purpose 8-bit MPU bus compatible</li> <li>● Parallel data, serial data conversion</li> <li>● Permit direct connect with M66009</li> </ul>	<ul style="list-style-type: none"> <li>● Communication, PPC Vending machines, FA</li> <li>● Microcomputer peripheral</li> </ul>
Advanced asynchronous receiver and transmitter (A <sup>2</sup> RT)	M66230P/FP	24P4D/24P2W-A	CMOS	<ul style="list-style-type: none"> <li>● 4-byte FIFO data buffer for transmission and reception</li> <li>● Error detection : CRC-CCITT, parity</li> <li>● Includes Baud rate generator 500 kbps (max)</li> <li>● Includes wake up function</li> </ul>	