# SGS-THOMSON
MICROELECTRONICS

M3488

CMOS 256 X 256 DIGITAL SWITCHING MATRIX

- HARDWARE (pin-to-pin) AND SOFTWARE COMPATIBLE WITH M088
- 256 INPUT AND 256 OUTPUT CHANNEL DIGITAL SWITCHING MATRIX
- BUILDING BLOCK DESIGNED FOR LARGE CAPACITY ELECTRONIC EXCHANGES, SUB-SYSTEMS AND PABX
- NO EXTRA PIN NEEDED FOR NOT-BLOCKING SINGLE STAGE AND HIGH CAPACITY SYNTHESIS BLOCKS (512 or 1024 channels)
- EUROPEAN AND U.S. STANDARD COMPATIBLE (32/24 serial channels per frame)
- PCM INPUTS AND OUTPUTS MUTUALLY COMPATIBLE
- ACTUAL INPUT-OUTPUT CHANNEL CONNECTIONS STORED AND MODIFIED VIA AN ON CHIP 8-BIT PARALLEL MICROPROCESSOR INTERFACE
- 6 MAIN "FUNCTIONS" OR "INSTRUCTIONS" AVAILABLE
- TYPICAL BIT RATE : 2Mbit/s
- TYPICAL SYNCHRONIZATION RATE : 8KHz (time frame is 125µs)
- 5V POWER SUPPLY WITH INTERNALLY GENERATED BIAS VOLTAGE
- TYPICAL CURRENT CONSUMPTION IS 22mA
- MOS & TTL INPUT/OUTPUT LEVELS COMPATIBLE
- DIFFUSED WITH HIGH DENSITY ADVANCED 1.2 µm CMOS PROCESS HCMOS3
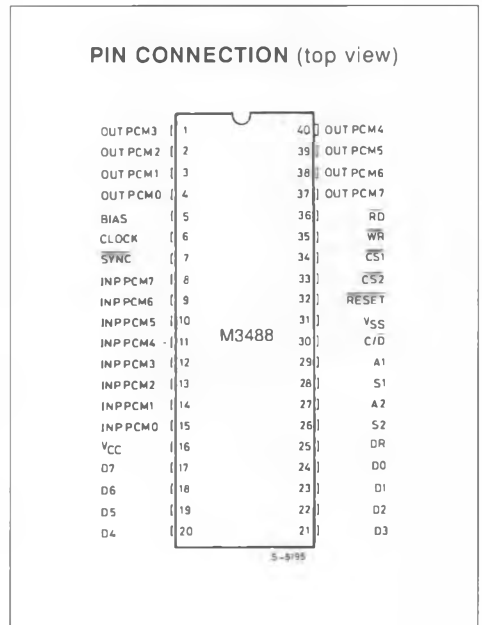
Main instructions controlled by the microprocessor interface
- CHANNEL CONNECTION/DISCONNECTION
- CHANNEL DISCONNECTION
- INSERTION OF A BYTE ON A PCM OUTPUT CHANNEL
- TRANSFER TO THE MICROPROCESSOR OF A SINGLE PCM OUTPUT CHANNEL SAMPLE
- TRANSFER TO THE MICROPROCESSOR OF A SINGLE OUTPUT CHANNEL CONTROL WORD
- TRANSFER TO THE MICROPROCESSOR OF A SELECTED 0 CHANNEL PCM INPUT DATA

DIP40
(Ceramic)

ORDER CODE : M3488F1

PIN CONNECTION (top view)

	M3488	
OUT PCM3	1	40 OUT PCM4
OUT PCM2	2	39 OUT PCM5
OUT PCM1	3	38 OUT PCM6
OUT PCM0	4	37 OUT PCM7
BIAS	5	36 RD
CLOCK	6	35 WR
SYNC	7	34 CS1
INP PCM7	8	33 CS2
INP PCM6	9	32 RESET
INP PCM5	10	31 VSS
INP PCM4	11	30 C/D
INP PCM3	12	29 A1
INP PCM2	13	28 S1
INP PCM1	14	27 A2
INP PCM0	15	26 S2
VCC	16	25 DR
D7	17	24 D0
D6	18	23 D1
D5	19	22 D2
D4	20	21 D3