

# Product Specification Sheet

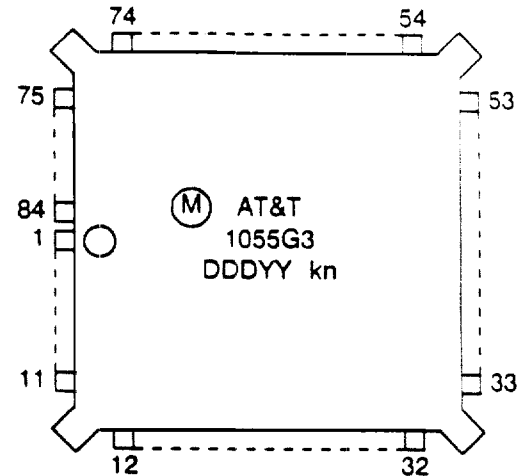


Initial Use  
DACS4

## 1055G3 Multiplexer/Demultiplexer

### Description

The 1055G3 Multiplexer/Demultiplexer (M12) is an asynchronous device that multiplexes four DS1 signals into a DS2 signal and demultiplexes a DS2 signal into four DS1 signals.



**Package Outline**  
84-pin chip carrier (0.025" pitch)  
Dimensions per 3ZPF08410

### Characteristics

<b>Absolute Maximum Ratings</b>	
Power Supply Voltage	$V_{DD} - V_{SS} = 7.0 \text{ V}$
Input Voltage	$V_{SS}$ to $V_{DD}$ (for $V_{DD} - V_{SS} > 6.1 \text{ V}$ )
Storage Temperature	$-40 \text{ }^\circ\text{C}$ to $+125 \text{ }^\circ\text{C}$
<b>Recommended Maximum Operating Conditions</b>	
Power Supply Voltage	$V_{DD} - V_{SS} = 5.5 \text{ V}$
Input Voltage	$(V_{SS} - 0.3 \text{ V})$ to $(V_{DD} + 0.3 \text{ V})$
Operating Temperature	$-40 \text{ }^\circ\text{C}$ to $+85 \text{ }^\circ\text{C}$
<b>ESD Threshold (Highest Passing Voltage)</b>	
Human Body Model	$> 500 \text{ V}$ all pins, $> 1000 \text{ V}$ cor. pins
Charged Device Model	$> 300 \text{ V}$ all pins
<b>General Characteristics</b>	
I/O Levels	TTL and/or CMOS compatible
Technology	$0.9 \text{ } \mu\text{m}$ CMOS custom logic
Power Supply	$5 \text{ V} \pm 10\%$
Package	Plastic chip carrier
Max. Power Dissipation	250 mW

For additional information, contact your AT&T Account Manager or the following:

- AT&T Microelectronics  
Dept. AL500404200  
555 Union Boulevard  
Allentown, PA 18103  
1-800-372-2447  
FAX 215-778-4106
- In Canada  
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PS92-002ASIC-34

Replace PS90-001CMOS-37

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\*AT&T S129\*

Pin Identification								
Pkg Pin	Type	Signal Name	Pkg Pin	Type	Signal Name	Pkg Pin	Type	Signal Name
1	OUT-TS	R1DAT3O	29	IN-MOS-PU	GPI6I	57	VSS	VSS.M2
2	IN-MOS-PU	X1CLK0I	30	IN-MOS-PU	GPI5I	58	OUT-TS	CIRDO
3	IN-MOS-PU	X1DAT0I	31	IN-MOS-PU	GPI4I	59		
4	IN-MOS-PU	X1CLK1I	32	IN-MOS-PU	GPI3I	60	IN-MOS	CICDI
5	IN-MOS-PU	X1DAT1I	33	IN-MOS-PU	GPI2I	61		
6	IN-MOS-PU	X1CLK2I	34	IN-MOS-PU	GPI1I	62	IN-MOS	CICEIN
7	VSS	VSS.M1	35	IN-MOS-PU	GPI0I	63	IN-MOS	CICLKI
8	VDD	VDD.M1	36			64		
9	IN-MOS-PU	X1DAT2I	37	IN-MOS	R2CLKI	65	VSS	VSS.M2
10	IN-MOS-PU	X1CLK3I	38			66	OUT-TS	GPO0O
11	IN-MOS-PU	X1DAT3I	39	IN-MOS	R2DATI	67	OUT-TS	GPO1O
12			40	IN-MOS-PU	XSBDATI	68	OUT-TS	GPO2O
13			41	VDD	VDD.M1	69	OUT-TS	GPO3O
14			42	VSS	VSS.M1	70	OUT-TS	GPO4O
15			43			71		
16			44	IN-MOS-PU	X2SYNIN	72	OUT-TS	CK15O
17			45			73	OUT-TS	OOFO
18	IN-MOS	REFCLKI	46			74	OUT-TS	RSBDATO
19	IN-MOS-PU	TRIIN	47			75	OUT-TS	RSBCKLO
20	IN-MOS-PU	RESETIN	48	IN-MOS	X2CLKI	76	OUT-TS	R1CLK0O
21			49	OUT-TS	XSBCCKO	77	OUT-TS	R1DAT0O
22	IN-MOS-PU	ONESECI	50			78	OUT-TS	R1CLK1O
23	IN-MOS-PU	GPI11I	51	OUT-TS	X2DATO	79	OUT-TS	R1DAT1O
24	VSS	VSS.M1	52			80	VDD	VDD.M2
25	IN-MOS-PU	GPI10I	53	OUT-TS	X2CKLO	81	VSS	VSS.M2
26	IN-MOS-PU	GPI9I	54	OUT-OD	CICSRON	82	OUT-TS	R1CLK2O
27	IN-MOS-PU	GPI8I	55	OUT-OD	CIERRON	83	OUT-TS	R1DAT2O
28	IN-MOS-PU	GPI7I	56	VDD	VDD.M2	84	OUT-TS	R1CLK3O

Terminology	
IN — Input pin	SCH — Schmitt Trigger Input
OUT — Output pin	OPEN — Unused in this application
I/O — Bidirectional pin	PU — Pull-up resistor on pin
VDD — Power pin (5 V nominal)	PD — Pull-down resistor on pin
VSS — Ground pin	TS — 3-state output
TTL — Logic levels (0.4 V and 2.4 V nominal)	OD — Open-drain output
MOS — Logic levels (0.5 V and 4.5 V nominal)	