

SONY.**CXB1145Q/Q-Y****Dual 8: 1 Multiplexer with D-FF***T-68-11-51***Description**

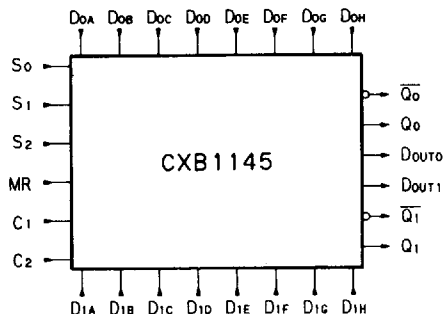
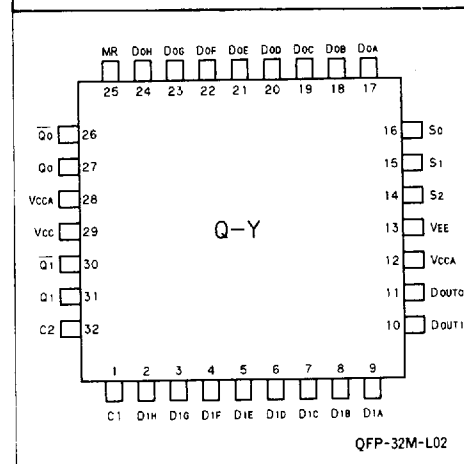
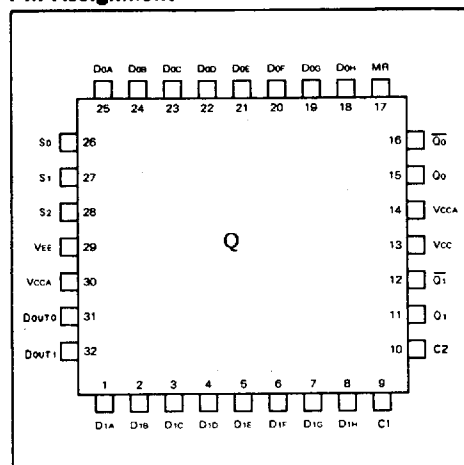
The CXB1145Q is an ultra high speed monolithic ECL IC, which contains two 8: 1 multiplexers followed by D type flip flops. The data select (S₀-S₂) inputs determine which data is enabled. The selected data is transferred to the flip flops output by the positive transition of clocks (C₁, C₂) input. The Master Reset overrides all other control inputs and turns Q outputs to LOW.

Features

- Typical clock rate up to 2.6 GHz
- Differential outputs
- Internal pull down resistors on input pins to maintain logic LOW level with the pins left open
- ECL 100K compatible I/O levels

Pin Names

D _{1A} -D _{1H}	Data inputs
Q _n , $\overline{Q}_n$	Data outputs
S _n	Data select inputs
C _n	Clock inputs
D _{OUTn}	Data sence outputs
MR	Direct Master Reset input
V _{CC}	Circuit ground
V _{CCA}	Circuit ground for outputs
V _{EE}	Negative power supply

Logic Symbol**Pin Assignment**

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CXB1145Q/QY

DC Characteristics*T-68-11-51* $V_{EE} = -4.5V \pm 0.3V$, $V_{CC} = V_{CCA} = GND$, $V_{TT} = -2.0V$, $T_C = 0^\circ C$ to $+85^\circ C$

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Power supply current	I_{EE}		-130	-95	-66	mA

Note: Other DC Characteristics; See pages 3-3 and 3-4.

AC Characteristics $V_{EE} = -4.5V \pm 0.3V$, $V_{CC} = V_{CCA} = GND$, $V_{TT} = -2.0V$, $T_C = 0^\circ C$ to $+85^\circ C$, $R_T = 50\Omega$ to V_{TT}

Item	Symbol	Input	Output	Test Conditions	Min.	Typ.	Max.	Unit
Propagation delay time	T _{PLH}	Cn	Qn		570	760	990	ps
	T _{PHL}				590	790	1030	
	T _{PLH}	MR			710	950	1240	
	T _{PHL}				720	970	1270	
	T _{PLH}	D	Doutn		670	900	1170	
	T _{PHL}				660	880	1150	
	T _{PLH}	Sn			850	1140	1490	
	T _{PHL}				840	1120	1460	
Gate-to-Gate skew	T _{SG-G}	Cn	Qn		30	80		
Set up time	T _s	D, Cn		330				
		Sn, Cn		520				
Hold time	T _h	Cn, D		-80				
		Cn, Sn		-270				
Release time	T _r	MR, Cn		380				
Min. Pulse width	T _{PW}	MR		540				
Max. Clock frequency	f _{MAX}	Cn		2.0	2.6		GHz	
Rise time	T _{TLH}			20% to 80%		250	330	ps
Fall time	T _{THL}					210	280	

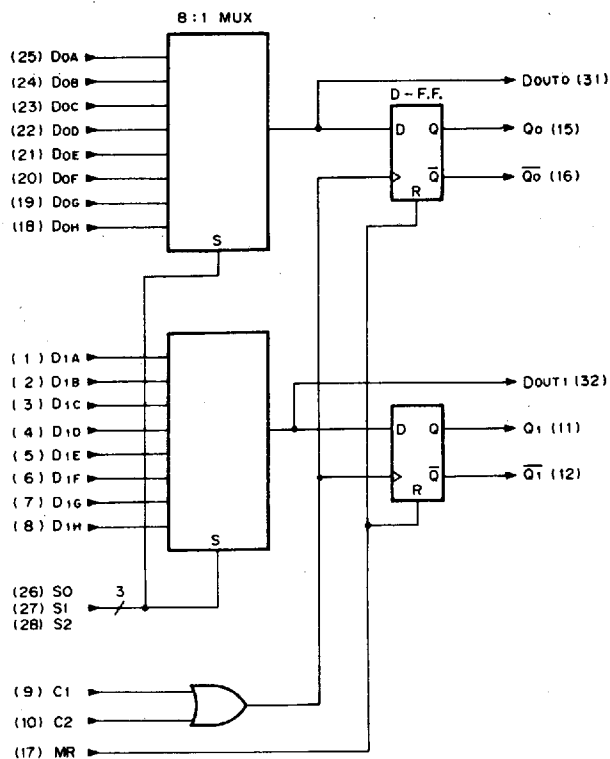
Note: AC Test Circuit; See pages 4-3, 4-4 and 4-5.

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Block Diagram

T-68-11-51



Package Data

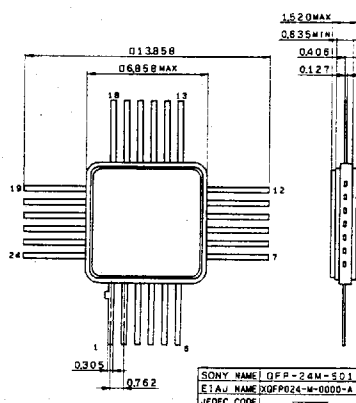
T-90-20

Package Outline

Unit: mm

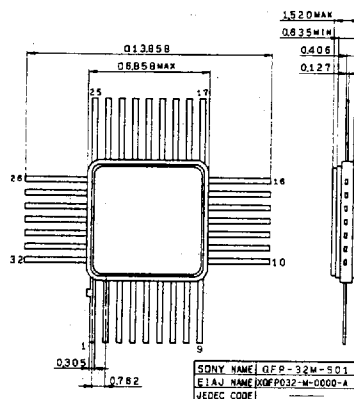
24pin QFP (QFP-24M-S01)

24pin QFP (Metal) 0.3g



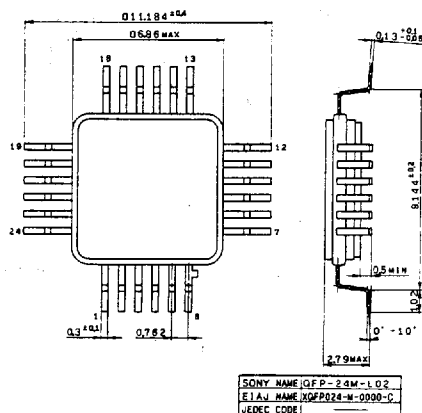
32pin QFP (QFP-32M-S01)

32pin QFP (Metal) 0.2g



24pin QFP (QFP-24M-L02)

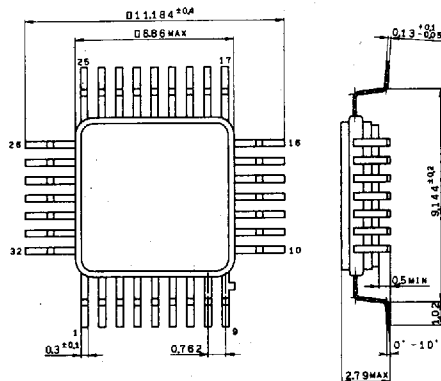
24pin QFP (Metal) 0.3g



T-90-20

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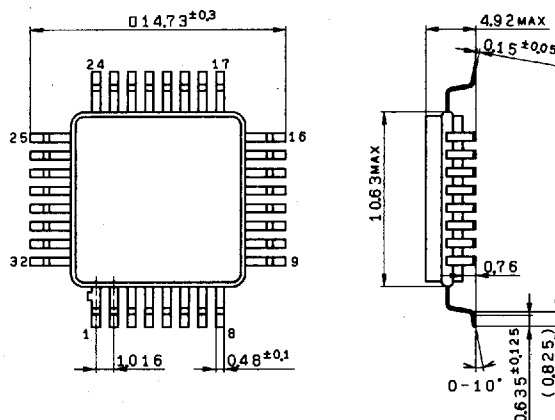
32pin QFP (Metal) 0.2g



SONY NAME	QFP-32M-L02
EIAJ NAME	XQFP032-M-0000-C
JEDEC CODE	

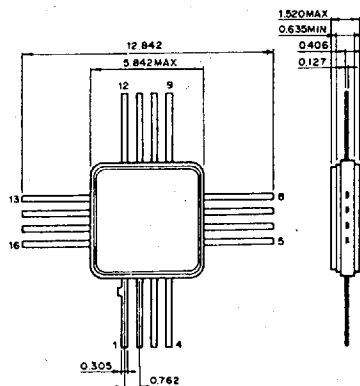
32pin QFP (QFP-32C-L01)

32pin QFP (Ceramic)



SONY NAME	QFP-32C-L01
EIAJ NAME	XQFP032-G-0000-A
JEDEC CODE	

16pin QFP



Package Data

Package Data	Page
1. 16 pin QFP	6-3
2. 24 pin QFP	6-3
3. 32 pin QFP	6-3
4. 24 pin QFP with formed lead	6-4
5. 32 pin QFP with formed lead	6-4

Package Data

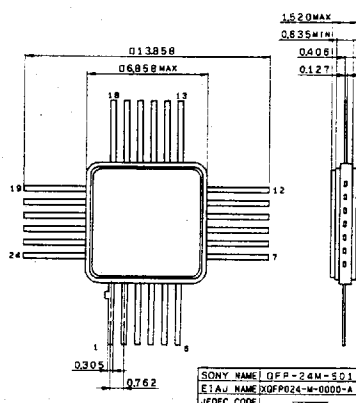
T-90-20

Package Outline

Unit: mm

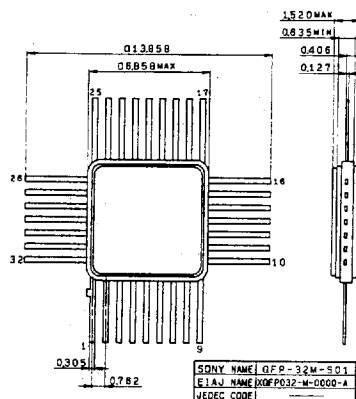
24pin QFP (QFP-24M-S01)

24pin QFP (Metal) 0.3g



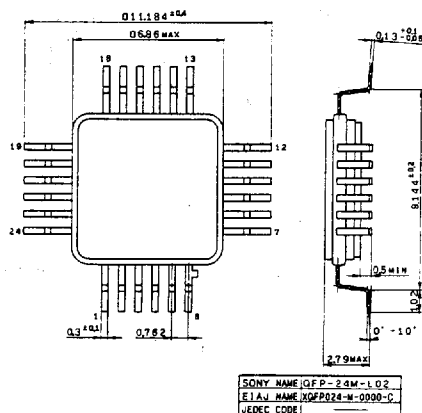
32pin QFP (QFP-32M-S01)

32pin QFP (Metal) 0.2g



24pin QFP (QFP-24M-L02)

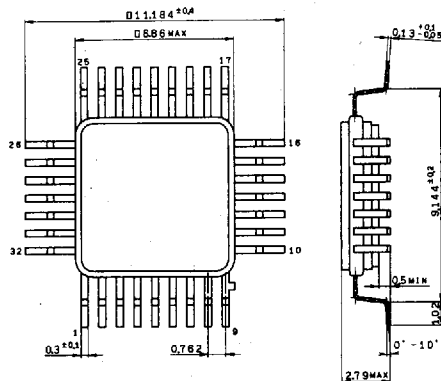
24pin QFP (Metal) 0.3g



T-90-20

32pin QFP (QFP-32M-L02)

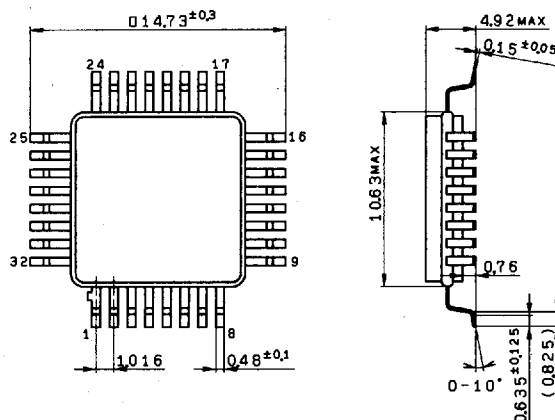
32pin QFP (Metal) 0.2g



SONY NAME	QFP-32M-L02
EIAJ NAME	XQFP032-M-0000-C
JEDEC CODE	

32pin QFP (QFP-32C-L01)

32pin QFP (Ceramic)



SONY NAME	QFP-32C-L01
EIAJ NAME	XQFP032-G-0000-A
JEDEC CODE	

16pin QFP

