

SONY**CXB1115Q/Q-Y****Clock Distributor with Enable and 10 Differential Outputs***T-50-23***Description**

The CXB1115 is an ultra high speed monolithic clock distributor, with low skew. Clock input has differential input pins C and $\bar{C}$. The input signal is fanned out to 10 differential outputs.

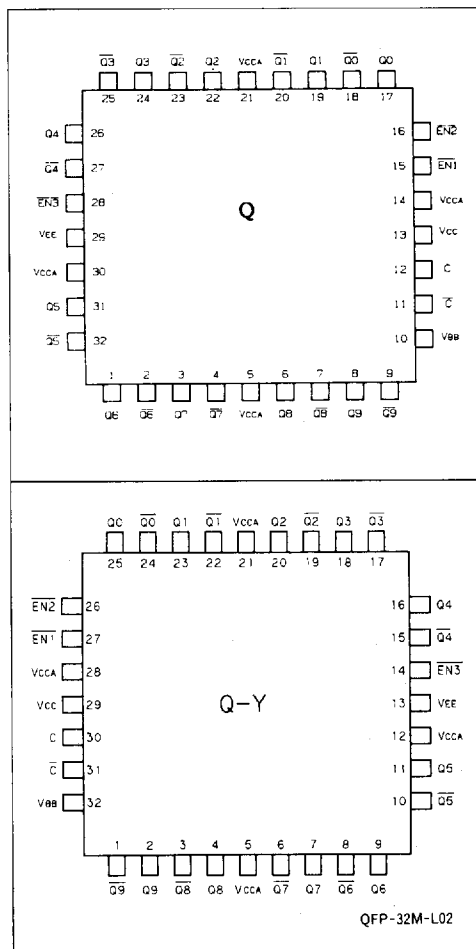
Enable inputs (EN1-EN3) control clock inputs. Built-in reference voltage is provided at V_{BB} pin to facilitate the use of single input operation.

Feature

- Small gate-to-gate skew: 30ps
- Differential clock input and output
- Built-in reference voltage for single ended input operation
- 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

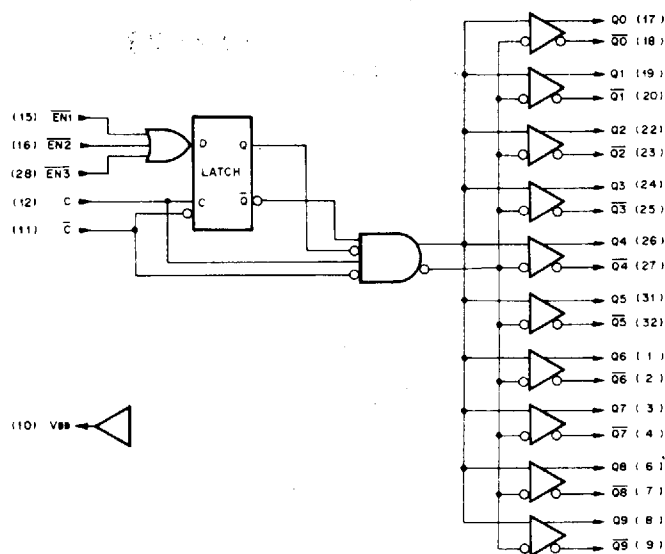
C, $\bar{C}$	Clock inputs
$Q_n, \bar{Q}_n$	Clock outputs
$\overline{EN}_n$	Clock enables (active LOW)
V_{BB}	Reference voltage output
VCC	Circuit ground
V_{CCA}	Circuit ground for outputs
V_{EE}	Negative power supply

Block Diagram**Pin Assignment**

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DC Characteristics

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

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Power supply current	I_{EE}		-244	-178	-124	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 Condition	Min.	Typ.	Max.	Unit
Propagation Delay time	T_{PLH}	C	Qn		570	760	970	ps
	T_{PHL}				570	760	970	
Gate-to-Gate Skew	T_{SG-G}					30	50	
Set up time	T_S				150			
Hold time	T_H				260			
Rise time	T_{TLH}			20% to 80%		180	230	
Fall time	T_{THL}					180	230	

Note: AC test circuit; See pages 4-3, 4-4 and 4-5.

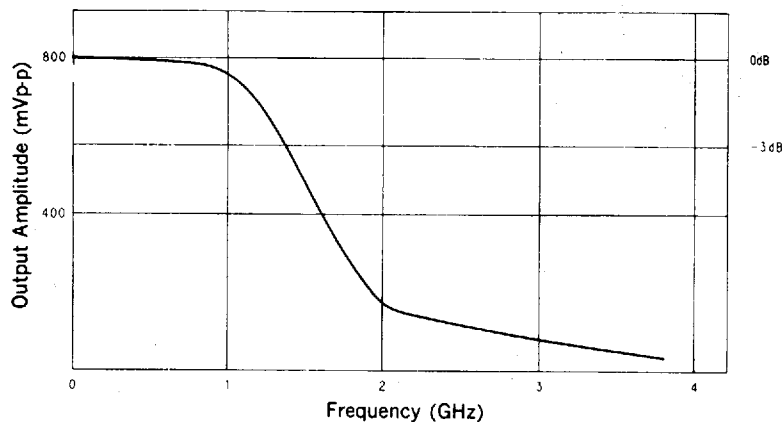


Figure 1. Frequency characteristics

Package Data

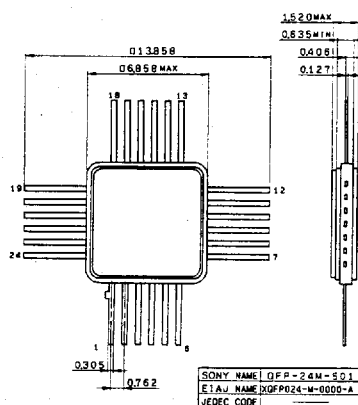
T-90-20

Package Outline

Unit: mm

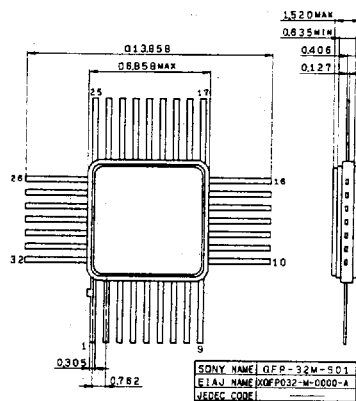
24pin QFP (QFP-24M-S01)

24pin QFP (Metal) 0.3g



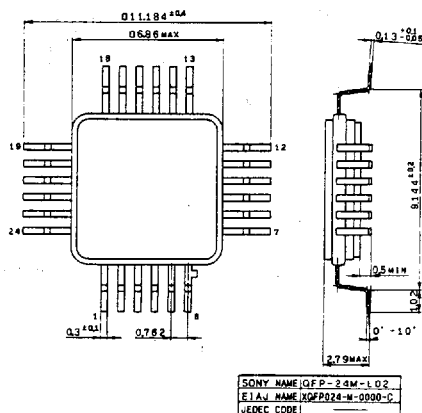
32pin QFP (QFP-32M-S01)

32pin QFP (Metal) 0.2g



24pin QFP (QFP-24M-L02)

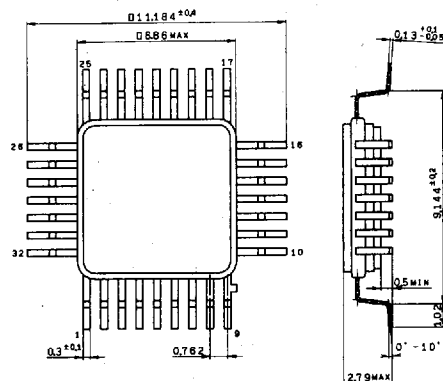
24pin QFP (Metal) 0.3g



T-90-20

32pin QFP (QFP-32M-L02)

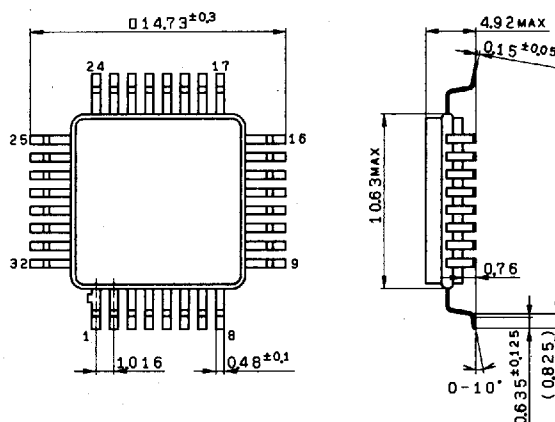
32pin QFP (Metal) 0.2g



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

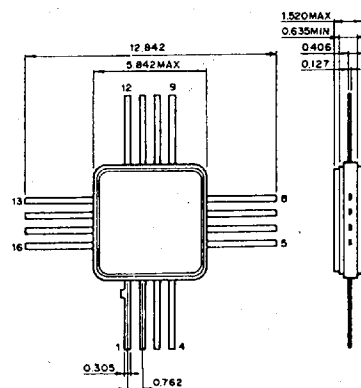
32pin QFP (QFP-32C-L01)

32pin QFP (Ceramic)



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

16pin QFP



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

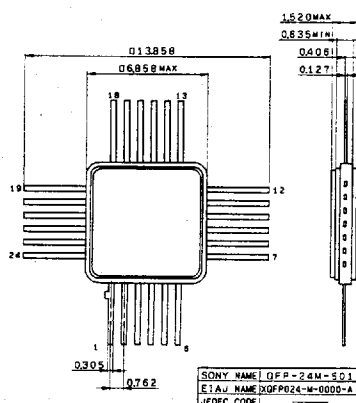
T-90-20

Package Outline

Unit: mm

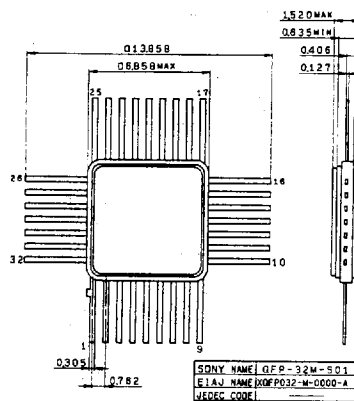
24pin QFP (QFP-24M-S01)

24pin QFP (Metal) 0.3g



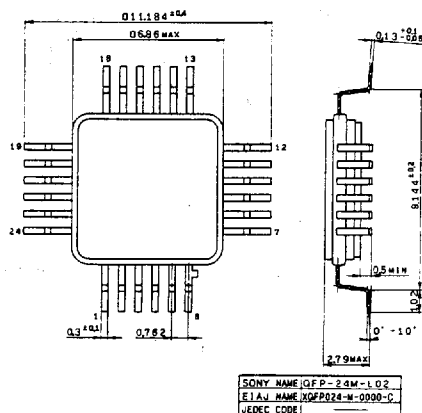
32pin QFP (QFP-32M-S01)

32pin QFP (Metal) 0.2g



24pin QFP (QFP-24M-L02)

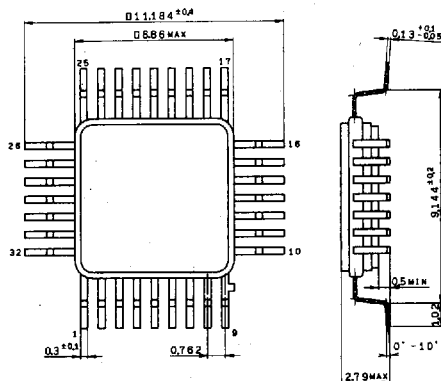
24pin QFP (Metal) 0.3g



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32pin QFP (QFP-32M-L02)

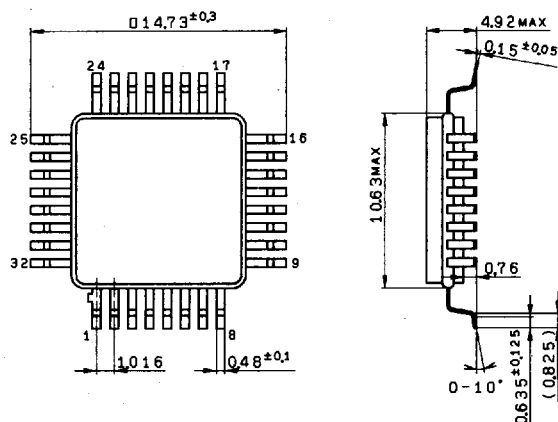
32pin GFP (Metal) 0.2g



SONY NAME	QFP-32M-L02
EIAJ NAME	XGFP032-M-0000-C
JEDEC CODE	

32pin QFP (QFP-32C-L01)

32pin GFP (Ceramic)



SONY NAME	QFP-32C-L01
EIAJ NAME	XGFP032-G-0000-A
JEDEC CODE	

16pin QFP

