



Quad Freq LVDS+CMOS Oscillator

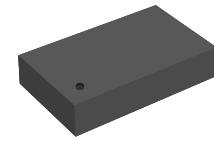
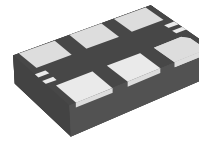
125 / 150 / 200 / 250MHz with 50MHz CMOS

4EA1250A0Z4

ADVANCE DATASHEET

Features

- 4 LVDS Frequencies: 125, 150, 200 & 250MHz
- 1 CMOS output: 50MHz
- Frequency Stability: $\pm 50\text{ppm}$
- Supply Voltage: 2.5V and 3.3V
- Standard Packages: 7.0 x 5.0 mm
- RMS phase jitter: 1 ps typical (12k to 20MHz)
- Operating Temperature: -40 to 85 °C

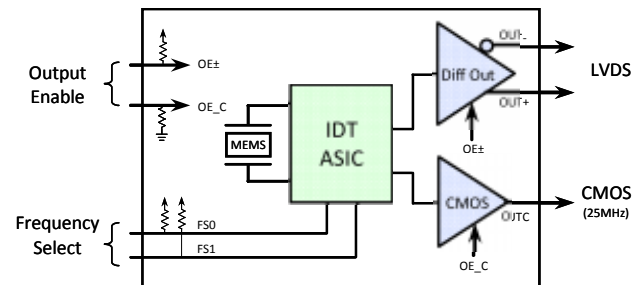


7.0 x 5.0 mm package

General Description

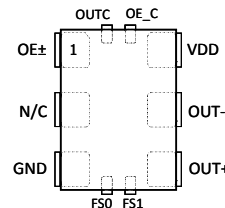
The 4EA1250A0Z4 is a quad frequency oscillator incorporating IDT's pMEMS technology to generate up to four LVDS clock frequencies. An additional synchronous CMOS output is also provided for general purpose clocking. One 4EA1250A0Z4 can replace up to 5 separate crystal oscillators, reducing inventory and bill-of-material cost. The pinout and footprint is backward compatible to industry standard 7050 size oscillators, ensuring second source compatibility to traditional 6 pin SMD oscillators.

Functional Block Diagram



Pin Description

Pin	Name	Description
1	OE±	LVDS Output Enable
6, 7	OUT+, OUT-	LVDS Output
2	N/C	No connect
3, 8	GND, VDD	Supply Voltage
4, 5	FS0, FS1	Frequency Select
9	OE_C	CMOS Output Enable
10	OUTC	CMOS Output



Frequency Table

Input*	Output (MHz)	
FS[1,0]	LVDS	CMOS
1,1	125.00	50.0
1,0	150.00	
0,1	200.00	
0,0	250.00	

* FS0, FS1 includes weak pull-up resistor

Enable/Disable

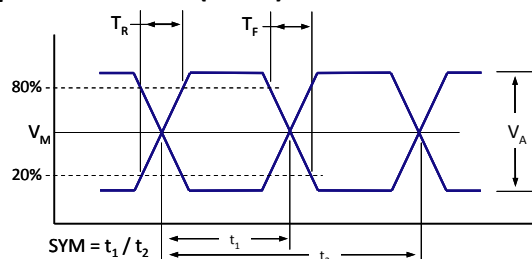
OE±*	LVDS
HI	ON
LOW	OFF

*Includes weak pull-up resistor

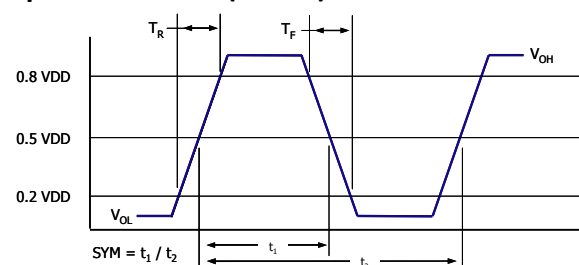
OE_C*	CMOS
HI	ON
LOW	OFF

*Includes weak pull-down resistor

Output Waveform (LVDS)



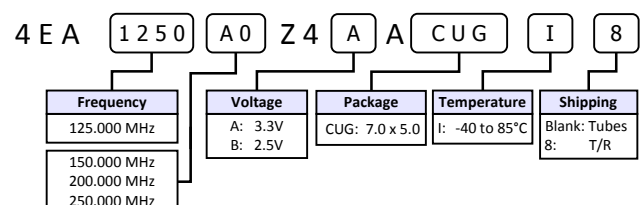
Output Waveform (CMOS)

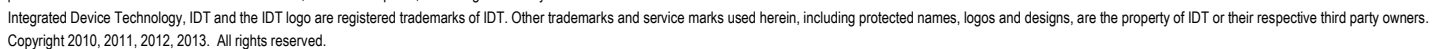


Part Ordering Information

Package Size	Voltage	Ordering Code
7.0 x 5.0 mm	3.3V	4EA1250A0Z4AACUGI
	2.5V	4EA1250A0Z4BACUGI

* Factory minimum order quantity: 500pcs (T/R)





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