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Status: **NRND**

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M1033

VCSO Based Clock PLL with Autoswitch Function

The M1033 is a VCSO (Voltage Controlled SAW Oscillator) based clock jitter attenuator PLL designed for clock jitter attenuation and frequency translation. The device is ideal for generating the transmit reference clock for optical network systems supporting up to 2.5Gb data rates. It can serve to jitter attenuate a stratum reference clock or a recovered clock in loop timing mode. The M1033 module includes a proprietary SAW (surface acoustic wave) delay line as part of the VCSO. This results in a high frequency, high-Q, low phase noise oscillator that assures low intrinsic output jitter.

Features

- Integrated SAW delay line
- Low phase jitter of < 0.5ps rms, typical (12kHz to 20MHz)
- Output frequencies of 62.5 to 175 MHz (Specify VCSO output frequency at time of order)
- LVPECL clock output (CML and LVDS options available)
- Reference clock inputs support differential LVDS, LVPECL, as well as single-ended LVC MOS, LV TTL
- Loss of Reference (LOR) output pin
- Narrow Bandwidth control input (NBW pin)
- AutoSwitch (AUTO pin) - automatic (non-revertive) reference clock reselection upon clock failure
- Acknowledge pin (REF_ACK pin) indicates the actively selected reference input
- Phase Build-out only upon MUX reselection option (PBOM)
- Pin-selectable feedback and reference divider ratios
- Single 3.3V power supply
- Small 9 x 9 mm SMT (surface mount) package

Product Specification

Inputs (#)	Operating Freq	Outputs (#)	Output Signaling	Input Freq (MHz)	Output Freq Range (MHz)	Phase Noise Typ RMS (ps)	M/R Look-Up Table	Xtal Inputs (#)
2	155.52000	1	LVPECL	15.0000000 - 700.000000	62.500000 - 175.000000	0.400	Yes	

Product Options

Orderable Part ID	Part Status	Pkg. Code	Pkg. Type	Lead Count (#)	Temp. Grade	Pb (Lead) Free	Carrier Type	Sample & Buy
M1033-16-155.5200	NRND	CG36	CLCC	36	C	Yes	TUBE	Check Availability
M1033-16-155.5200T	NRND	CG36	CLCC	36	C	Yes	Reel	Check Availability

Documents

Title	Type	Format	File Size	Date
IDT Timing Device Nomenclature	Guide	PDF	1.02 MB	11/21/2013
PDN#: Z-13-01 PRODUCT DISCONTINUANCE NOTICE	Product Discontinuation Notice	PDF	71 KB	03/19/2013

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