ZL30164



Features

- Fully compliant SEC (G.813), EEC (G.8262) and Stratum 3E flexible rate conversion DPLL
- Three programmable digital PLLs/Numerically Controlled Oscillators (NCOs)
- Synchronize to any clock rate from 1 Hz to 750 MHz
- Four programmable synthesizers generate any clock rate from 1 Hz to 750 MHz with low jitter for 10G PHYs
- Flexible two-stage architecture translates between arbitrary data rates, line coding rates and FEC rates
- Digital PLLs filter jitter from 0.1 mHz up to 1 kHz
- Automatic hitless reference switching and digital holdover on reference fail
- Nine input references configurable as single ended or differential and two single ended input references
- Any input reference can be fed with sync (frame pulse) or clock

Triple Channel Network Synchronization Clock Translator

Short Form Data Sheet

March 2014

Ordering Information

ZL30164GDG2 144 Pin LBGA Trays

Pb Free Tin/Silver/Copper

-40°C to +85°C Package Size: 13 x 13 mm

- Programmable DPLLs can synchronize to sync pulse and sync pulse/clock pair
- Eight LVPECL outputs and eight LVCMOS outputs
- Operates from a single crystal resonator or clock oscillator
- Field programmable via SPI/I²C interface

Applications

- SyncE/SONET/SDH Timing Cards
- Synchronous Ethernet, 10 GBASE-R and 10 GBASE-W
- SONET/SDH, Fibre Channel, XAUI



Figure 1 - Functional Block Diagram



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