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### Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







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# **Microsemi**

### **Network Synchronization Clock Translator**

Short Form Data Sheet

#### **Features**

- Fully compliant SEC (G.813) and EEC (G.8262) flexible rate conversion DPLL
- Four 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 maximum jitter below 0.61ps RMS
- Flexible two-stage architecture translates between arbitrary data rates, line coding rates and FEC
- 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

#### **Ordering Information**

ZL30162GDG2 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/I<sup>2</sup>C interface

#### **Applications**

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

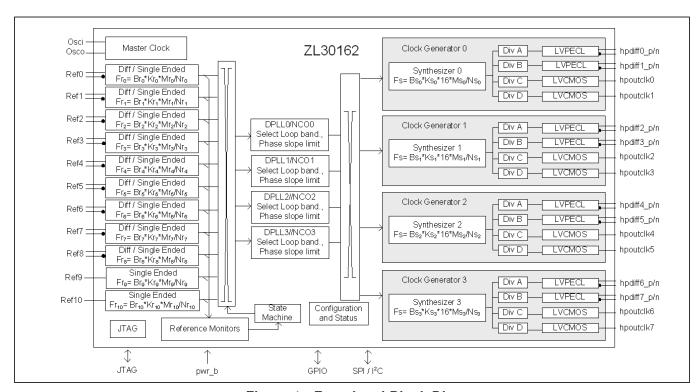


Figure 1 - Functional Block Diagram



## For more information about all Microsemi products visit our Web Site at

### www.microsemi.com/timing-and-synchronization

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