

# ZL30160 Four Channel Universal Clock Translator

Short Form Data Sheet

January 2012

#### **Features**

- · Four independent clock channels
- Programmable synthesizers generate any clockrate from 1 kHz to 750 MHz
- Two precision synthesizers generate clocks with jitter below 0.7 ps RMS for 10 G PHYs
- Two general purpose synthesizers generate a wide range of digital bus clocks
- Programmable digital PLLs synchronize to any clock rate from 1 kHz to 750 MHz
- Flexible two-stage architecture translates between arbitrary data rates, line coding rates and FEC rates
- Digital PLLs filter jitter from 14 Hz, 28 Hz, 56 Hz, 112 Hz, 224 Hz, 448 Hz or 896 Hz
- Automatic hitless reference switching and digital holdover on reference fail
- Four reference inputs configurable as single ended or differential

### **Ordering Information**

ZL30160GGG 100 Pin LBGA Trays ZL30160GGG2 100 Pin LBGA\* Trays

\*Pb Free Tin/Silver/Copper -40°C to +85°C

- Eight LVPECL outputs and four LVCMOS outputs
- Eight outputs configurable as LVCMOS or LVDS/LVPECL/HCSL
- Operates from a single crystal resonator or clock oscillator
- Configurable via SPI/I2C interface

#### **Applications**

- 10 Gigabit line cards
- Synchronous Ethernet, 10 GBASE-R and 10 GBASE-W
- · OTN multiplexers and transponders
- SONET/SDH, Fibre Channel, XAUI

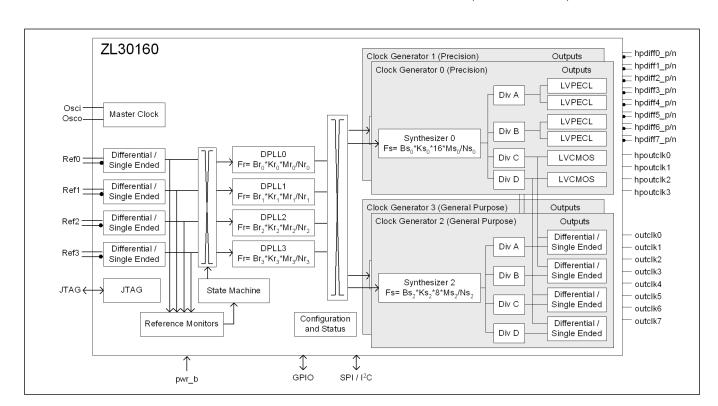
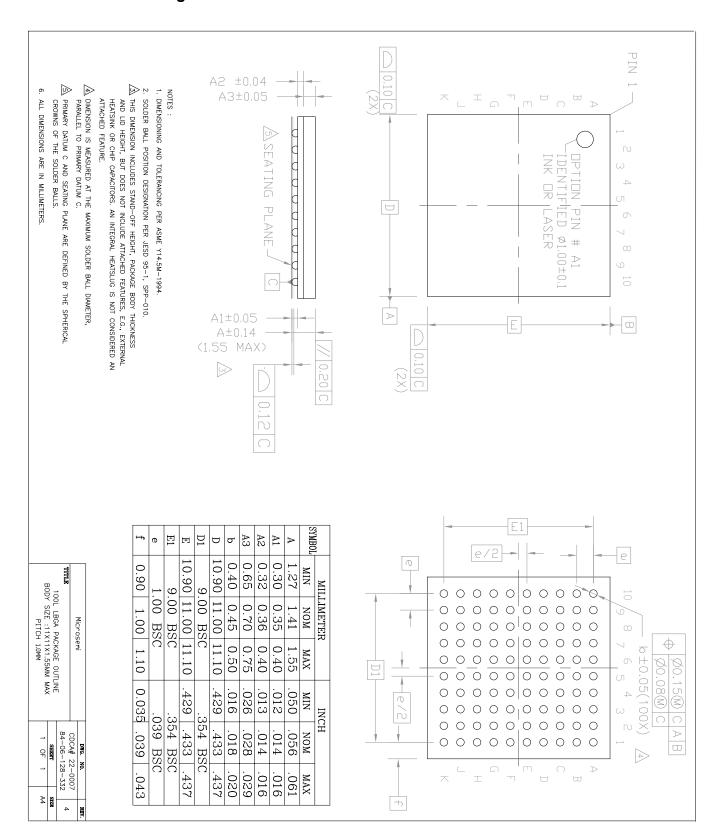


Figure 1 - Functional Block Diagram



#### **Mechanical Drawing**



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