

**Features**

- Four independent clock channels
- Programmable synthesizers generate any clock-rate from 1 kHz to 720 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 720 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**

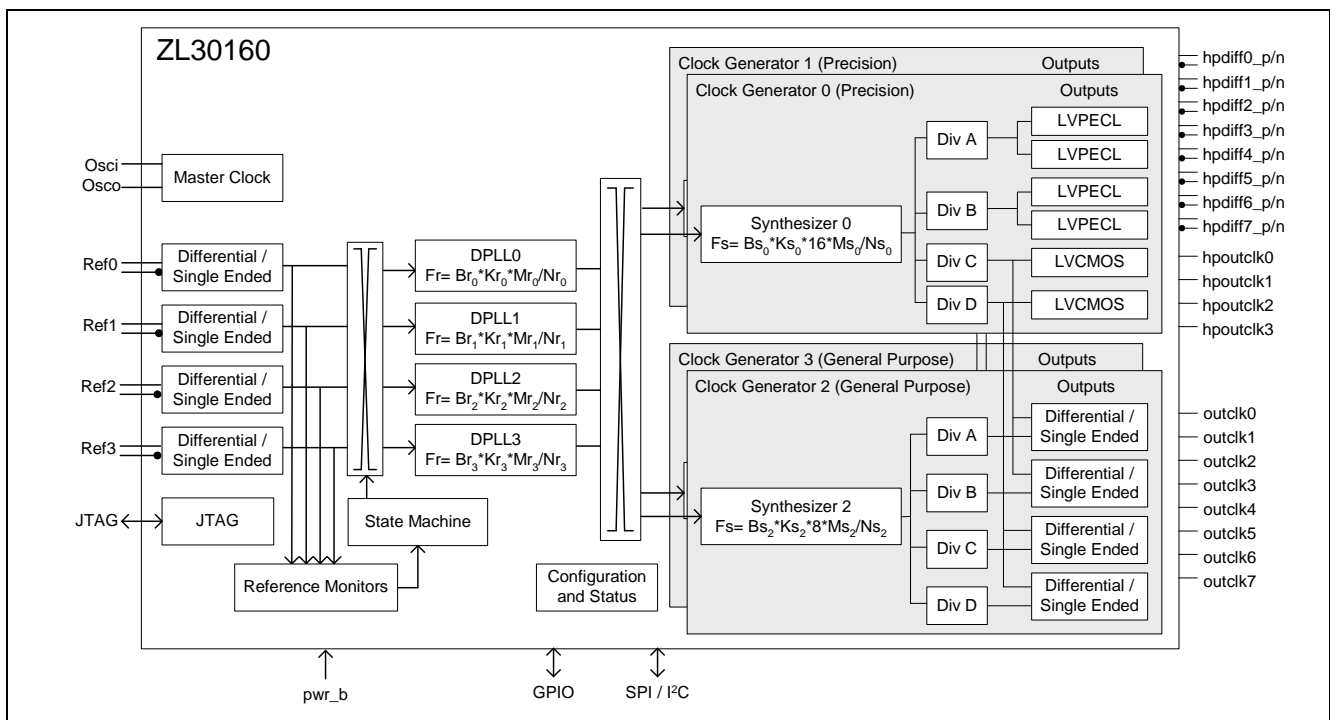
ZL30160GGG	100 Pin CABGA	Trays
ZL30160GGG2	100 Pin CABGA*	Trays

\*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, XAU1

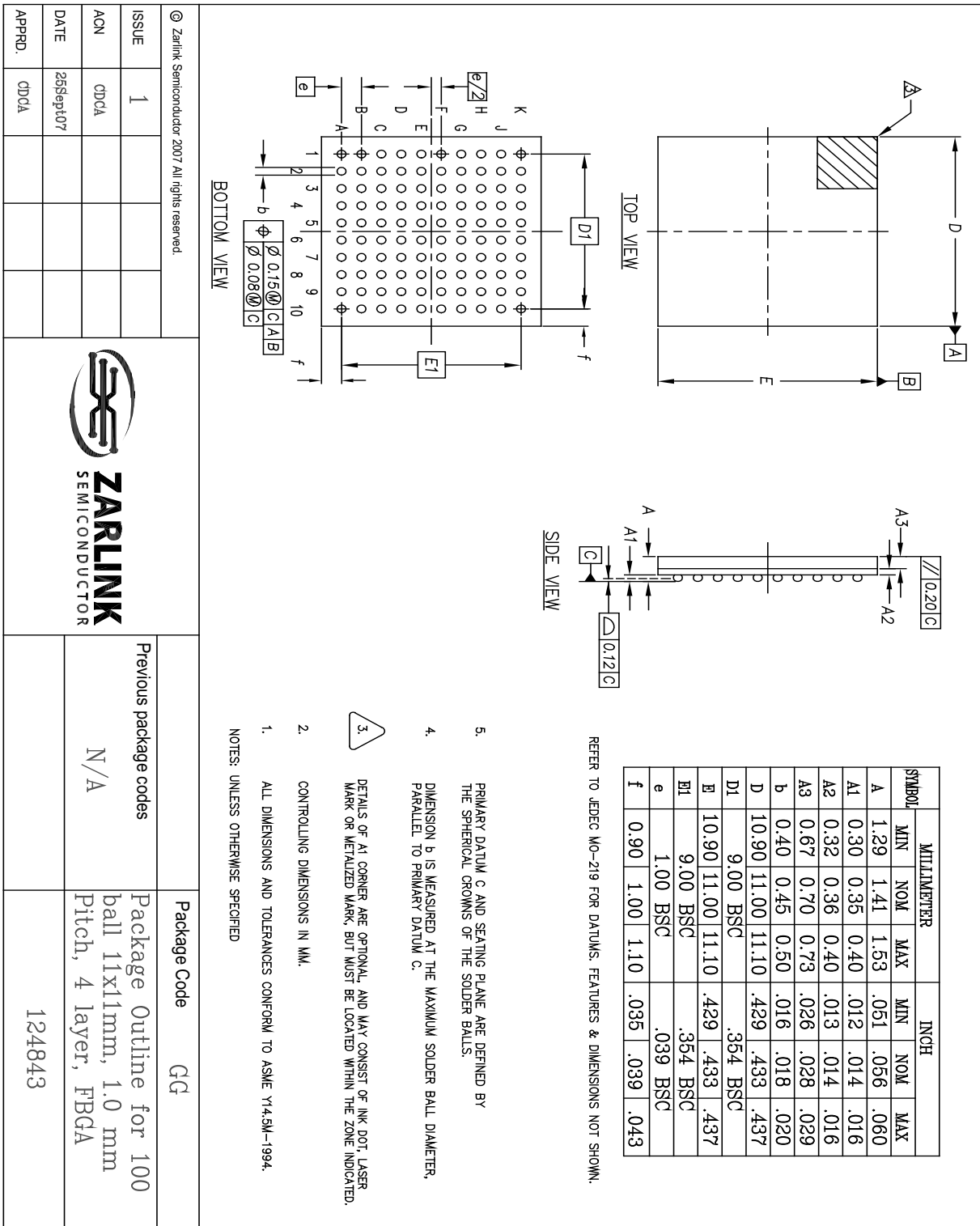

**Figure 1 - Functional Block Diagram**

**Description**

The ZL30160 Four Channel Universal Clock Translator, part of Zarlink's ClockCenter platform of Synchronous Clock devices, delivers industry leading synchronization performance for high-speed, complex applications. The highly integrated and programmable solution provides translation from any input reference frequency to any output clock frequency with jitter performance that can directly drive 10 G PHY devices.

The ZL30160 integrates 4 independent digital PLLs, accepts 4 input references and generates 20 programmable clock outputs. The highly integrated solution allows designers to replace multiple components with a single chip, simplifying design and reducing component count and power.

Mechanical Drawing



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ISSUE	1
ACN	CDCA
DATE	25Sept07
APPRD.	CDCA



Previous package codes	Package Code	GG
N/A	Package Outline for 100 ball 11x11mm, 1.0 mm Pitch, 4 layer, FBGA	124843



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