

Features

- Operates from a single crystal resonator, clock oscillator or voltage controlled oscillator
- Four independently programmable clock synthesizers generate any clock rate from 1 kHz to 720 MHz
- Precision synthesizers generate clocks with jitter below 0.7 ps RMS for 10 G PHYs
- General purpose synthesizers generate a wide range of digital bus clocks
- Supports programmable frequency offsets for clock margining; or for use as a digitally controlled oscillator
- Eight LVPECL outputs; max rate 720 MHz
- Four LVCMOS outputs; max rate 160 MHz
- Eight outputs configurable as LVCMOS at 3.3/2.5/1.8 or 1.5 V, max rate 160 MHz; or LVDS/LVPECL/HCSL, max rate 350 MHz
- Dynamically Configurable via SPI/I2C interface

Ordering Information

ZL30230GGG	100 Pin CABGA*	Trays
ZL30230GGG2	100 Pin CABGA*	Trays

*Pb Free Tin/Silver/Copper

-40°C to +85°C

Applications

- Timing for NPUs, FPGAs, Ethernet switches and PCIe switches
- Timing for 10 Gigabit CDRs, Rapid-IO, PCIe, Serial MII, Star Fabric, Fibre Channel, XAUI
- Processor clock, Processor bus clock, SDRAM clock, DDR clock

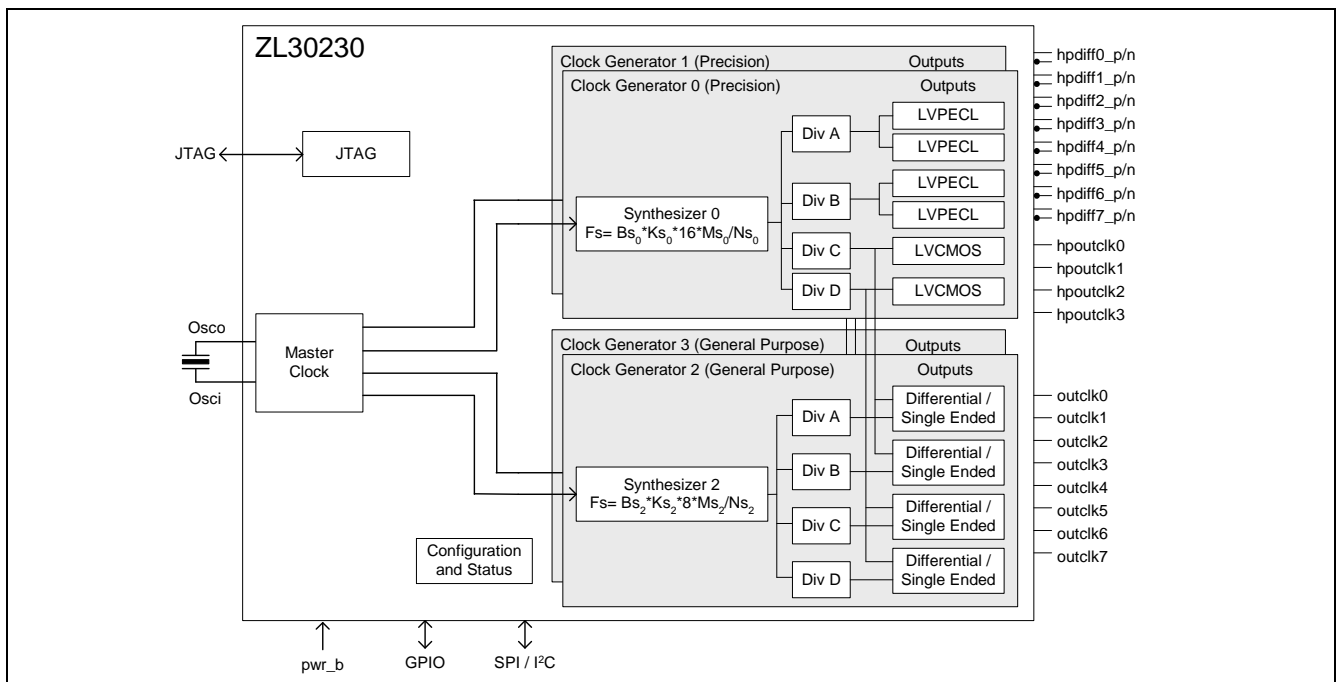


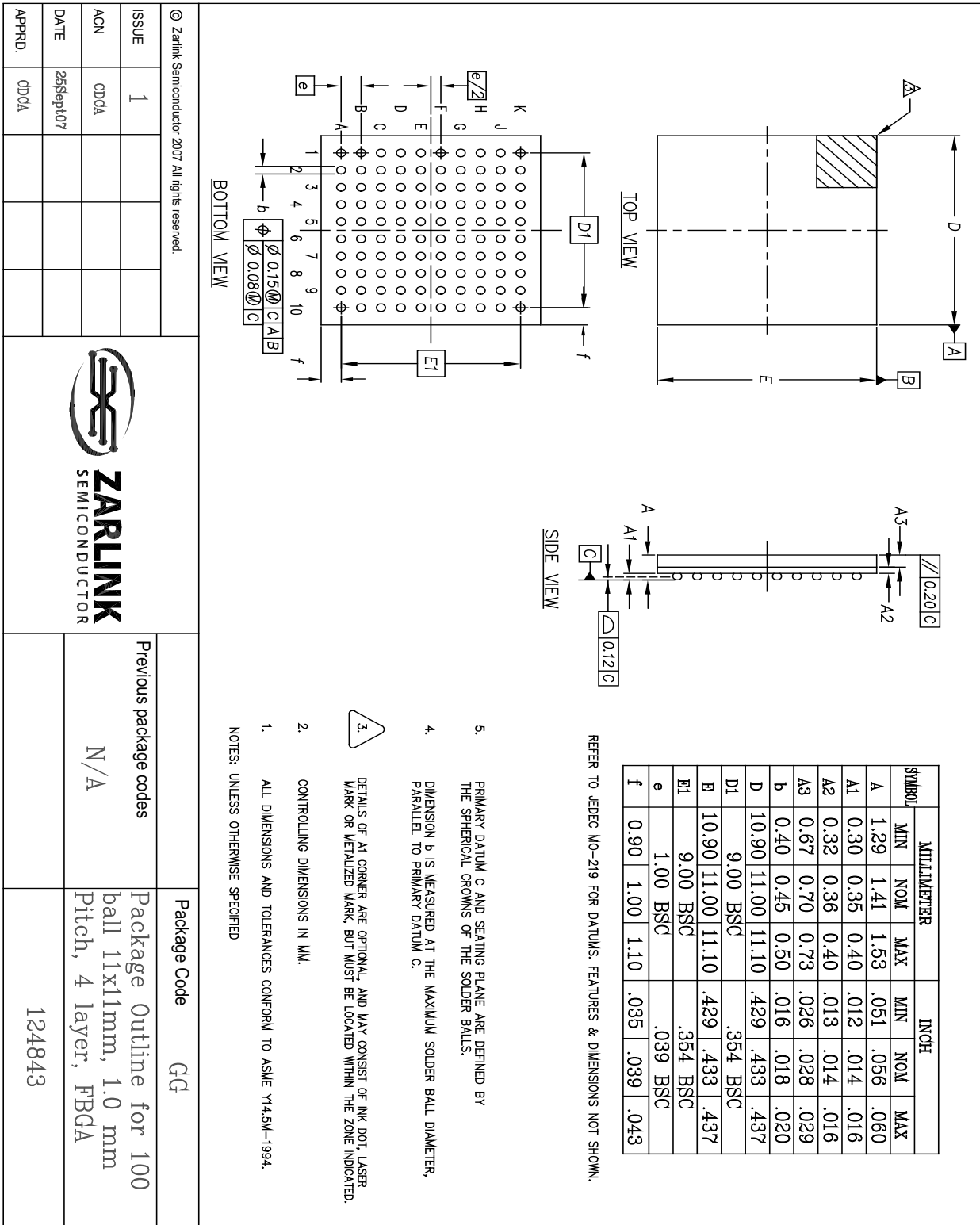
Figure 1 - Functional Block Diagram

Description

The ZL30230 Four Channel Universal Clock Generator, part of Zarlink's ClockCenter platform of Free Run Clock devices, delivers industry leading performance for a range of free run applications. The free run synchronization solution allows designers to replace multiple, costly components with a highly integrated and programmable, single-chip solution.

The ZL30230 device generates up to 20 clocks from a single crystal, allowing designers to replace numerous oscillators traditionally used to provide timing for various components with one chip.

Mechanical Drawing



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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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