

## Features

- Generates clock signals at power-up per user defined custom OTP (One Time Programmable) configuration
- Dynamically configurable via SPI/I2C interface and volatile configuration registers
- Four independently programmable clock generators output any clock rate from 1 kHz to 750 MHz (precision) / 350 MHz (general purpose)
- Precision clock generators output clocks with jitter below 0.7 ps RMS for 10 G PHYs
- General purpose clock generators output a wide range of digital bus clocks
- Operates from a single crystal resonator, clock oscillator or voltage controlled oscillator
- Supports programmable frequency offsets for clock margining; or for use as a digitally controlled oscillator
- Eight LVPECL outputs; max rate 750 MHz
- Four LVCMOS outputs; max rate 177.5 MHz

## Ordering Information

ZL30230GGG	100 Pin	LBGA	11mmx11mm Trays
ZL30230GGG2	100 Pin	LBGA*	11mmx11mm Trays

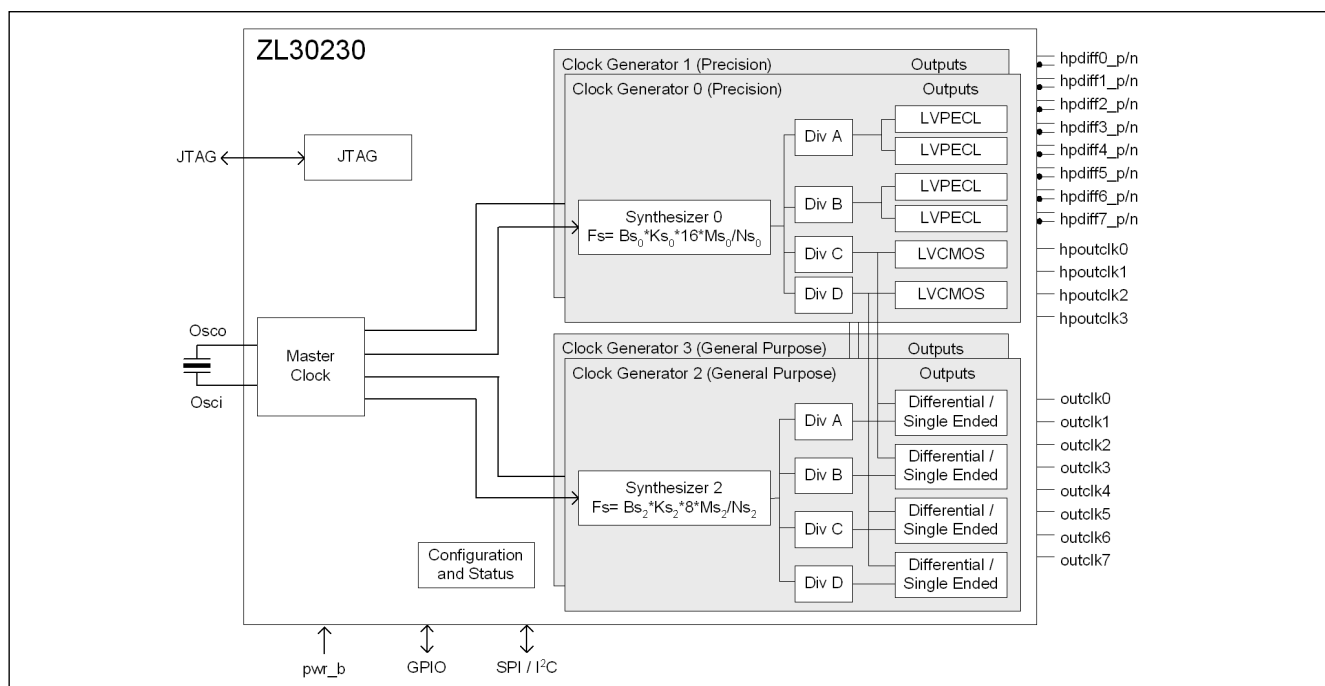
\*Pb Free Tin/Silver/Copper

**-40°C to +85°C**

- 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

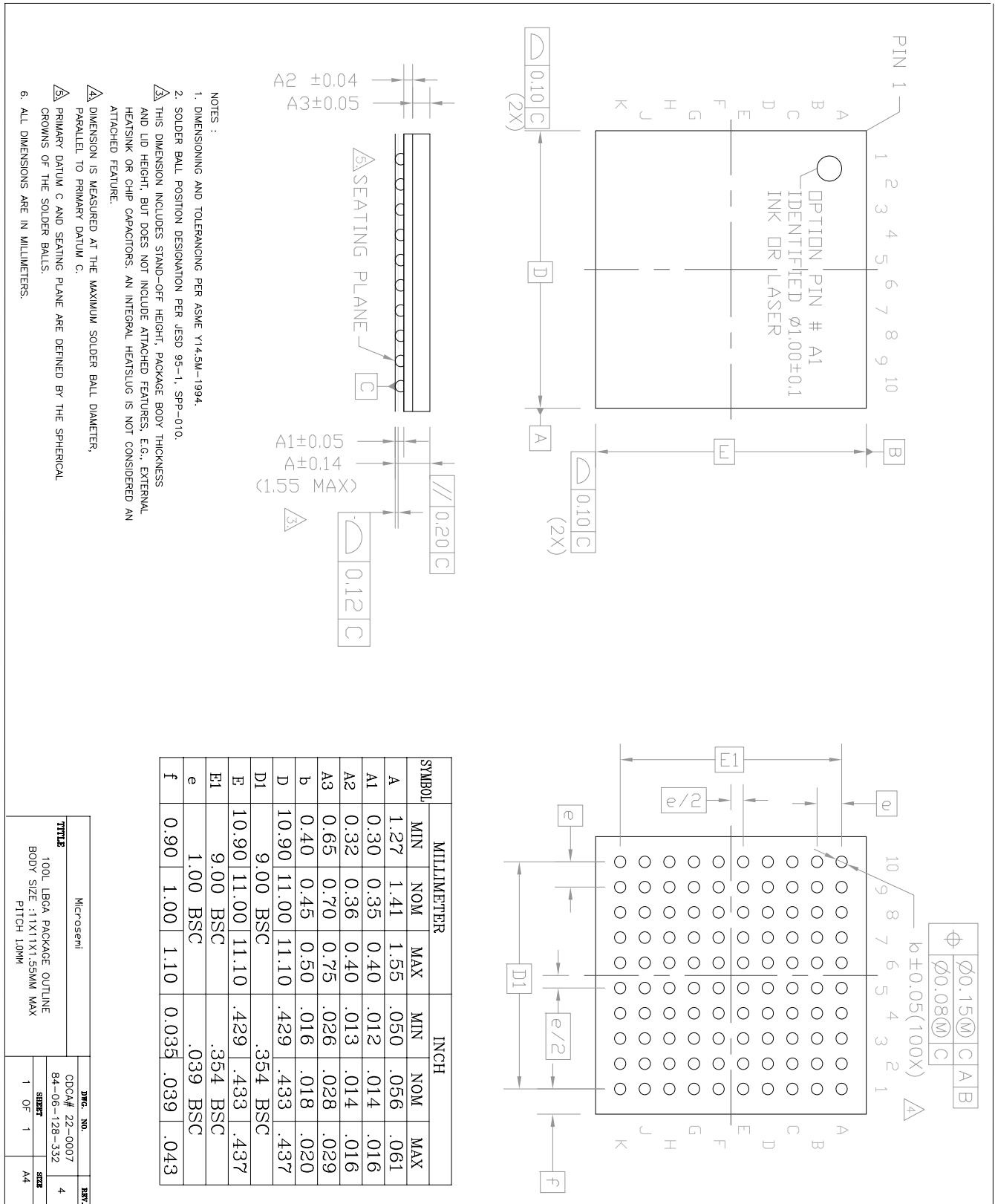
## Applications

- 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**

## Mechanical Drawing



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