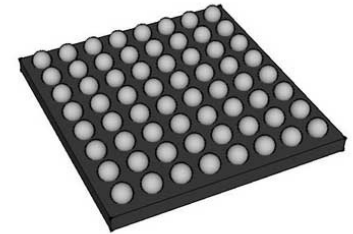


## System Synchronizer/SETS -40°C to 85°C 100-Pin CABGA Tray



Images are for reference only

[Inquiry](#)

**Manufacturer:** [Microchip Technology, Inc](#)

**Package/Case:** BGA

**Product Type:** Logic ICs

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### General Description

The ZL30143 System Synchronizer and SETS device is a highly integrated device that provides all of the functionality that is required for a central timing card in carrier grade network equipment. Simplified Block Diagram Typical Applications ITU-T G.8262 System Timing Cards which support 1 GbE and 10 GbE interfaces Telcordia GR-253 Carrier Grade SONET/SDH Stratum 3 System Timing Cards System Timing Cards which supports ITU-T G.781 SETS (SDH Equipment Timing Source)

## Key Features

Supports the requirements of ITU-T G.8262 for synchronous Ethernet Equipment slave Clocks (EEC option 1 and 2)

Supports the requirements of Telcordia GR-1244 Stratum 3 and GR-253, ITU-T G.813, and G.781 SETS

Supports ITU-T G.823, G.824 and G.8261 for 2048 kbit/s and 1544 kbit/s interfaces

Meets the SONET/SDH jitter generation requirements up to OC-48/STM-16

Synchronizes to telecom reference clocks (2 kHz, N\*8 kHz up to 77.76 MHz, 155.52 MHz) or to Ethernet reference clocks (25 MHz, 50 MHz, 62.5 MHz, 125 MHz)

Supports composite clock inputs (64 kHz, 64 kHz + 8 kHz, 64kHz + 8 kHz + 400 Hz)

Generates standard SONET/SDH clock rates (e.g., 19.44 MHz, 38.88 MHz, 77.76 MHz, 155.52 MHz, 622.08 MHz) or Ethernet clock rates (e.g., 25 MHz, 50 MHz, 125 MHz, 156.25 MHz, 312.5 MHz) for synchronizing Gigabit Ethernet PHYs

Programmable output synthesizers (P0, P1) generate telecom clock frequencies from any multiple of 8 kHz up to 100 MHz

Generates several styles of telecom frame pulses with selectable pulse width, polarity and frequency

Provides two DLLs which are independently configurable through a serial interface

Internal state machine automatically controls mode of operation (free-run, locked, holdover)

Flexible input reference monitoring automatically disqualifies references based on frequency and phase irregularities

Provides automatic reference switching and holdover during loss of reference input

Supports master/slave configuration and dynamic input to output delay compensation for AdvancedTCA

Configurable input to output delay and output to output phase alignment

## Application

ITU-T G.8262 System Timing Cards which support 1 GbE and 10 GbE interfaces

Telcordia GR-253 Carrier Grade SONET/SDH Stratum 3 System Timing Cards

System Timing Cards which supports ITU-T G.781 SETS (SDH Equipment Timing Source)

## Recommended For You

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### ZL30343GGG2

Microchip Technology, Inc

BGA100

### ZL40213LDGI

Microchip Technology, Inc

QFN

### ZL30100QDGI

Microchip Technology, Inc

QFP

### ZL30105QDGI

Microchip Technology, Inc

TQFP64

### ZL40200LDF1

Microchip Technology, Inc

VQFN

### ZL30122GGG2

Microchip Technology, Inc

BGA64

### ZL40200LDGI

Microchip Technology, Inc

VQFN-16

### ZL40202LDGI

Microchip Technology, Inc

new

### ZL30106QDGI

Microchip Technology, Inc

QFP64

**ZL30266LDGI**

Microchip Technology, Inc  
VQFN

**ZL40231LDGI**

Microchip Technology, Inc  
VQFN-48

**ZL30157GGG2**

Microchip Technology, Inc  
LBGA

**ZL30250LDGI**

Microchip Technology, Inc  
QFN

**ZL40223LDGI**

Microchip Technology, Inc  
VQFN-32

**ZL30117GGG2**

Microchip Technology, Inc  
BGA