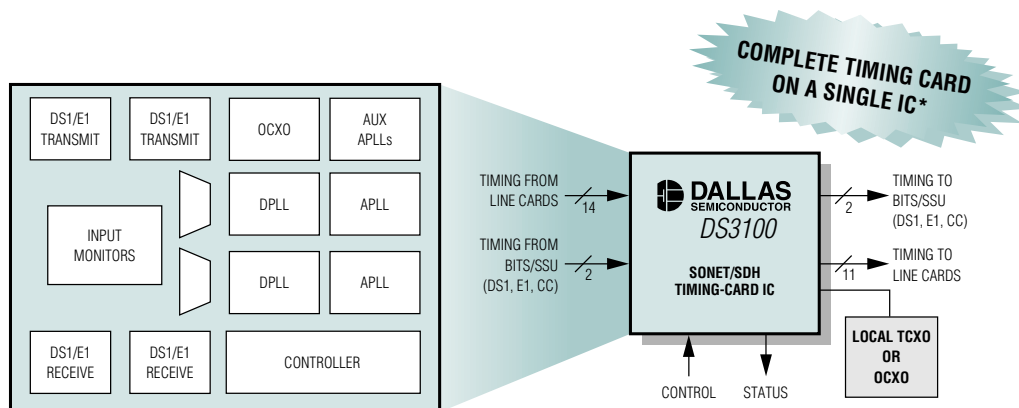


ONLY STRATUM 3-/3E-COMPLIANT TIMING-CARD IC WITH INTEGRATED DS1/E1/2048kHz TRANSCEIVERS

Ideal for Flexible Synchronization and Timing-Card Applications

The DS3100 integrates all timing-card functions into a single-chip solution. A typical SONET/SDH timing-card solution has multiple discrete analog and digital components, including PLLs, ASICs, FPGAs, microprocessors, and DS1/E1 transceivers. These solutions tend to be very expensive and require extensive DSP and PLL design knowledge. The DS3100 highly integrated, single-chip solution saves design time, board space, and cost. The DS3101 is available without the BITS/SSU transceivers.



Fourteen Input Clocks

- ◆ CMOS/TTL and Differential LVDS/PECL Inputs Support Rates Up to 155.52MHz
- ◆ Two 64kHz Composite Clock Receivers
- ◆ Supports 2kHz, 4kHz, and Any Multiple of 8kHz Up to 155.52MHz

Eleven Output Clocks

- ◆ CMOS/TTL and Differential LVDS Outputs Support Rates Up to 311.04MHz
- ◆ Composite Clock and Sync Pulse Outputs
- ◆ Supports 2kHz, 8kHz, NxDS1, Nx E1, Nx19.44MHz, DS3, E3, and 125MHz

General Features

- ◆ Stratum 3E Holdover Accuracy
- ◆ Hitless Reference Switching on Loss of Input
- ◆ Phase Buildout and Transient Absorption
- ◆ 125MHz Support for Timing Over GbE

Two BITS/SSU Transceivers (DS3100)

- ◆ DS1, E1, 2048kHz, and 6312kHz Timing Signals
- ◆ Insert and Extract SSM Messages (DS1, E1)

Part	Package	Temp Range (°C)	Price [†] (\$)
DS3100GN#	256-CSBGA	-40 to +85	60.94
DS3101GN#	256-CSBGA	-40 to +85	49.40

*Requires a local TCXO or OCXO.

†10k-up recommended resale, FOB USA. Prices provided are for design guidance and are for the lowest grade, commercial temperature parts. International prices will differ due to local duties, taxes, and exchange rates. Prices are subject to change. Not all packages are offered in 1k increments, and some may require minimum order quantities.



www.maxim-ic.com/DS3100

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