**Video Proc 1.2V 0.17A 100-Pin BGA**

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| **Manufacturer:** | Semtech Corporation |
| **Package/Case:** | BGA |
| **Product Type:** | Embedded Processors & Controllers |
| **RoHS:** | RoHS Compliant/Lead free |
| **Lifecycle:** | Active |

Images are for reference only

Inquiry

## General Description

The GS2962 is an SDI transmitter, generating a SMPTE 424M, SMPTE 292M, SMPTE 259M-C or DVB-ASI compliant serial digital output signal.

The integrated ClockCleaner™ allows the device to accept parallel clocks with high input jitter, and still provide a SMPTE compliant serial digital output.

The device can operate in four basic user selectable modes: SMPTE mode, DVB-ASI mode, Data-Through mode, or Standby mode.

In SMPTE mode, the GS2962 performs all SMPTE processing features. Both SMPTE 425M Level A and Level B formats are supported with optional conversion from Level A to Level B for 1080p 50/60 4:2:2 10-bit.

In DVB-ASI mode, the device will perform 8b/10b encoding prior to transmission.

In Data-Through mode, all SMPTE and DVB-ASI processing is disabled. The device can be used as a simple parallel to serial converter.

The device can also operate in a lower power Standby mode. In this mode, no signal is generated at the output.

The GS2962 includes a fully SMPTE-compliant cable driver for SMPTE 259M-C, SMPTE 292M and SMPTE 424M interfaces. It features automatic dual slew-rate selection, depending on 3G-, HD- or SD-SDI operational requirements.

## Key Features

Integrated low noise VCO and integrated ClockCleanerTM

SMPTE video processing including TRS calculation and insertion, line number calculation and insertion, line based CRC calculation and insertion, illegal code re-mapping, SMPTE 352M payload identifier generation and insertion

Integrated cable driver

Supports SMPTE 425M (Level A and Level B), SMPTE 424M, SMPTE 292M, SMPTE 259M-C and DVB-ASI

Operation at 2.970Gb/s, 2.970/1.001Gb/s, 1.485Gb/s, 1.485/1.001Gb/s and 270Mb/s

Ancillary data insertion

Optional conversion from SMPTE 425M Level A to Level B for 1080p 50/60 4:2:2 10-bit

Parallel data bus selectable as either 20-bit or 10-bit

GSPI Host Interface

1.2V digital core power supply, 1.2V and 3.3V analog power supplies, and selectable 1.8V or 3.3V I/O power supply

Low power operation (370 mW typical, including cable driver)

Small 11mm x 11mm 100-ball BGA package

Pb-free and ROHS compliant

## Application

Cameras

Camera Control Units

Multiviewers

Production Switchers

Master Control Switchers

VTRs

Video Servers

Encoders/Decoders

Up/Down/Cross Converters

Audio Embedders

Format Detectors

Test and Measurement Equipment

Order Codes

GS2962-IBTE3: Lead-Free, RoHS Compliant, Tape and Reel-250 Pieces

GS2962-IBE3: Lead-Free, RoHS Compliant, Tray-168 Pieces



**AVAQ SEMICONDUCTOR CO., LIMITED**

## Recommended For You

**GS2988-INE3**

Semtech Corporation

QFN

**GS2970-IBE3**

Semtech Corporation

BGA

**GS2971AIBE3**

Semtech Corporation

BGA

**GS1578ACNE3**

Semtech Corporation

QFN

**GS2972-IBE3**

Semtech Corporation

BGA100

**GS2989-INE3**

Semtech Corporation

QFN16

**GS1661AIBE3**

Semtech Corporation

BGA100

**GS12281-INE3**

Semtech Corporation

QFN40

**GS12070-IBE3**

Semtech Corporation

BGA196

**GS1559-CBE2**

Semtech Corporation

BGA

**GS2965-INE3**

Semtech Corporation

QFN

**GS2961-IBE3**

Semtech Corporation

BGA

**GS2971-IBE3**

Semtech Corporation

BGA

**GS6151-INTE3**

Semtech Corporation

32-VFQFN

**GS2960-IBE3**

Semtech Corporation

BGA100