

Sil9022 Features

Sil9022 Software & Documentation

Software

- Sil9022 firmware
- PC based diagnostic tool

Documentation

- Programmer's Reference
- Application Notes
- Datasheet

Compliance

- HDMI 1.2a
- Simplay HD
- DVI 1.0

Digital Video

- Integrated TMDS core
- DTV resolution support - 480i/576i/480p/576p/720p/1080i/1080p
- PC resolution support - VGA/XGA/SXGA/WSXGA/UXGA
- Flexible interface to HD MPEG decoders:
 - 12/24-bit RGB YCbCr 4:4:4
 - 16/20/24-bit YCbCr 4:2:2
 - 8/10/12-bit YCbCr 4:2:2 (ITU-R BT.601 & BT.656)
- Integrated YCbCr → RGB conversion
- 4:2:2 → 4:4:4 up-converter
- Programmable Data Enable (DE) generator

Digital Audio

- DVD-Audio support thru 4xI²S inputs
- Supports 2-channel 192kHz or 8-channel 96kHz
- Supports IEC60958 2-ch PCM or IEC61937 compressed audio (Dolby Digital, DTS, etc.)
- Industry-standard S/PDIF input
- Integrated MCLK generator

Consumer Electronic Control (CEC)

- Dedicated CEC signals
- Integrated hardware arbitration logic reduces local CPU overhead

System Operation

- Simplified API programming through Transmitter Programming Interface (TPI) and CEC Programming Interface (CPI)
- Programmable DDC controller simplifies system design
- Flexible interrupt registers with interrupt pin
- Monitor detection supported through hot plug and receiver sense

Power Management

- 1.2V, 1.8V and 3.3V cores provide low-power operation
- Flexible power-down modes

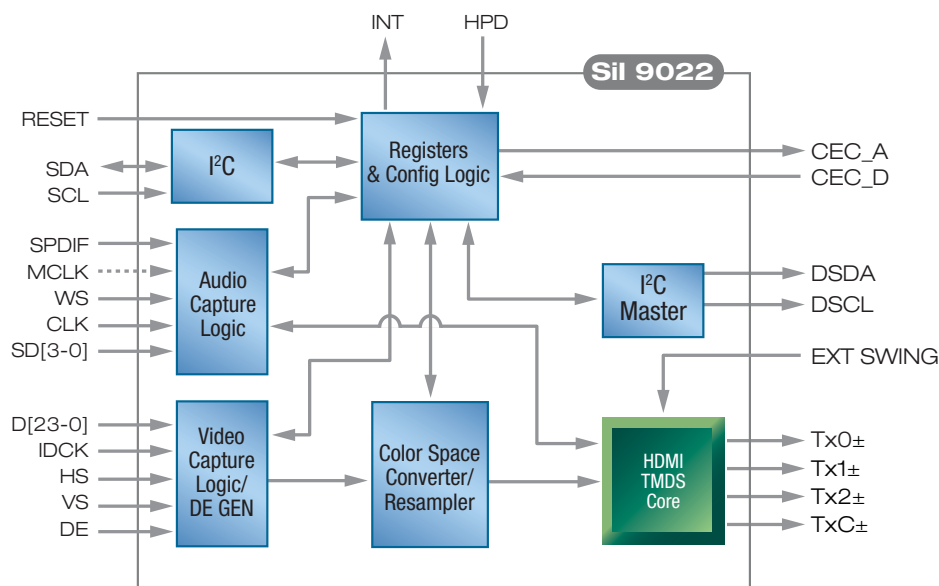
Available Packages

- 81-ball BGA (4mm x 4mm, 0.4mm ball pitch)
- 84-ball BGA (6mm x 6mm, 0.5mm ball pitch)

Operating Range

- -20°C to +85°C extended temperature support

Sil9022 Circuit Diagram



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Part Numbers: Sil9022EBU, Sil9022EBU6, Sil9022EBT

Sil-PB-1002 rev3 4/08