



GQW200-HQW200-SQW200

3Gb/s, HD, SD quad split to WUXGA converter /
multiview building block

A Synapse® product

Synapse

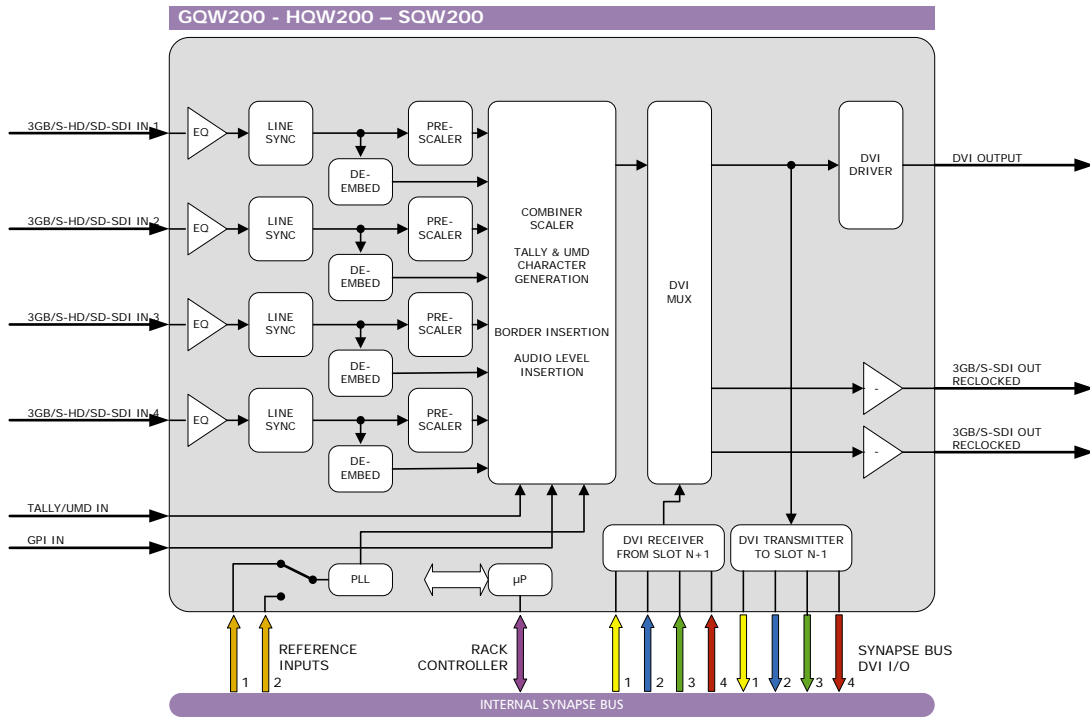


COPYRIGHT © 2008 AXON DIGITAL DESIGN BV

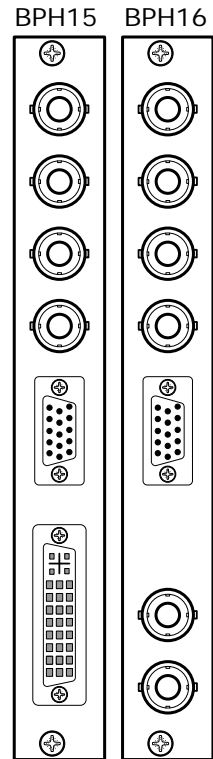
ALL RIGHTS RESERVED

NO PART OF THIS DOCUMENT MAY BE REPRODUCED IN ANY FORM
WITHOUT THE PERMISSION OF AXON DIGITAL DESIGN BV.

Block schematic & I/O panel



- 3Gb/s, HD, SD INPUT 1
- 3Gb/s, HD, SD INPUT 2
- 3Gb/s, HD, SD INPUT 3
- 3Gb/s, HD, SD INPUT 4
- TALLY UMD and GPI INPUT
- DVI OUTPUT (BPH15) 2x SDI OUTPUT (BPH16)



Features

The GQW200 is a high-quality 4x 3Gb/s or HD or SD-SDI (in any combination) to WUXGA converter on DVI or 3Gb/s HD SDI out. The unit supports resolutions up to 1920x1200. A Tally and UMD OSD is included. This will enable a very compact monitor solution with the UMD and Tally as part of the set. High-quality in-house developed de-interlacing and scaling algorithms ensure crisp picture quality. The GQW200 is triple rate (3Gb/s, HD and SD), the HQW200 is HD and SD, upgradeable to 3Gb/s and the SQW200 is SD only, upgradeable to handle HD or even 3Gb/s.

- Quad-split function or full-screen mode for each input
- Low latency (20 mS for 50Hz, 17 mS for 59.94Hz)
- Full 10 bit in RGB domain (internal 20bit processing for scaling)
- UP to 1920x1200 resolution on DVI (BPH15)
- Up to 1920x1080p on 3Gb/s SDI output (BPH16)
- **Full variable scaling and positioning for all individual inputs**
- All inputs compatible with (mixing is allowed within equal framerates):
 - 1080p 50 and 59.94
 - 1080i and 720p 50 and 59.94 Hz
 - 1080p (sf) and 720p 29.97/25/24
 - 1035i 60
 - SD 625 and 525
- 15pins sub-D connector for serial UMD, Tally protocols (TSL and ASCII) and GPI triggers
- 8 and 16 character UMD capability
- Three assignable regions in or under monitor
 - Input format
 - Static UMD
 - Dynamic UMD
- Lock to input, reference or free running
- Audio metering
 - 4 free selectable OSD audio level Bar-graphs
 - Masked or transparent bar-graphs
 - AES/EBU, BBC, Nordic and VU scales
 - Phase correlation between two AES channels
- Color corrector
- UMD colors:
 - White
 - Green
 - Red
 - Amber
- Border, UMD and tally brightness adjustment
- Safe area:
 - Action
 - Graphics
 - Action + Graphics
 - Shoot and protect 4:3
 - Shoot and protect Action
 - Shoot and protect Graphics
 - Shoot and protect Action + Graphics
- Automatic 4:3 and 16:9 modes through VI or WSS triggers (SD-SDI inputs)
- Display analog or digital Clock on VITC
- GPI control for:
 - Aspect ratio (4:3 or 16:9)
 - Full screen or quad mode
 - Tally
- Full control and status monitoring through the front panel of the SFR04/SFR08/SFR18 frame and the Ethernet port (ACP)

Applications

- High resolution monitor walls
- OB van preview monitoring and shading

Ordering information

Module:

- **GQW200:** 3Gb/s, HD, SD quad split to QWXGA converter on DVI or (3Gb/s, HD or SD) SDI.
- **HQW200:** HD/SD quad split to QWXGA converter on DVI or (3Gb/s, HD or SD) SDI. (upgradeable to handle 3Gb/s)
- **SQW200:** SD quad split to QWXGA converter on DVI or (3Gb/s, HD or SD) SDI. (upgradeable to handle HD or HD and 3Gb/s)

Standard I/O:

- **BPH15_GQW200:** I/O-panel for GQW200 with DVI output
- **BPH16_GQW200:** I/O-panel for GQW200 with SDI output
- **BPH15_HQW200:** I/O-panel for HQW200 with DVI output
- **BPH16_HQW200:** I/O-panel for HQW200 with SDI output
- **BPH15_SQW200:** I/O-panel for SQW200 with DVI output
- **BPH16_SQW200:** I/O-panel for SQW200 with SDI output

Specifications

Serial Video Input

Standard	625/50 or 525/59.94 SMPTE 259M-C (270Mb/s) with SMPTE 272M embedded audio SMPTE 292M (1.5Gb/s), SMPTE 260M, SMPTE 274M, SMPTE 296M, SMPTE 349M, SMPTE424 1080i/59.94, 1080i/50, 720p/59.94, 720p/50 1080p/50 and 1080p/59.94
Equalization	Automatic to 130m @ 1.5Gb/s with Belden 1694A or equivalent cable. Automatic to 100m @ 3Gb/s with Belden 1694A or equivalent cable.
Return Loss	> 15dB up to 1.5GHz
Number of Inputs	4

Reference Video Input

Standard	PAL (ITU624-4), NTSC (SMPTE 170M)
Number of Inputs	2 on SFR18, 2 on SFR08, 1 on SFR04
Connector	BNC
Signal Level	1V nominal
Impedance	High impedance, with loop for termination
Return Loss	> 25dB to 10MHz

DVI output

Standard	DVI digital single link 1920 x 1200
Number of Outputs	1
Cable driver	Up to 10 meter of high quality DVI cable (Gefen)

Serial video output

Standard	SMPTE 292M (1.5Gb/s), SMPTE 260M, SMPTE 274M, SMPTE 296M, SMPTE 349M, SMPTE424A
Number of Outputs	2 (optional Dual link)

Miscellaneous

Weight	Approx. 250g
Operating Temperature	0 °C to +50 °C
Dimensions	137 x 296 x 20 mm (HxWxD)

Electrical

Voltage	+24V to +30V
Power	<16 Watts