



HAS05M

**HD/SD 8-channel 2-group embedded audio processing
card with presets**

A Synapse ® product

Synapse

SynLite

**MASTER
Card**

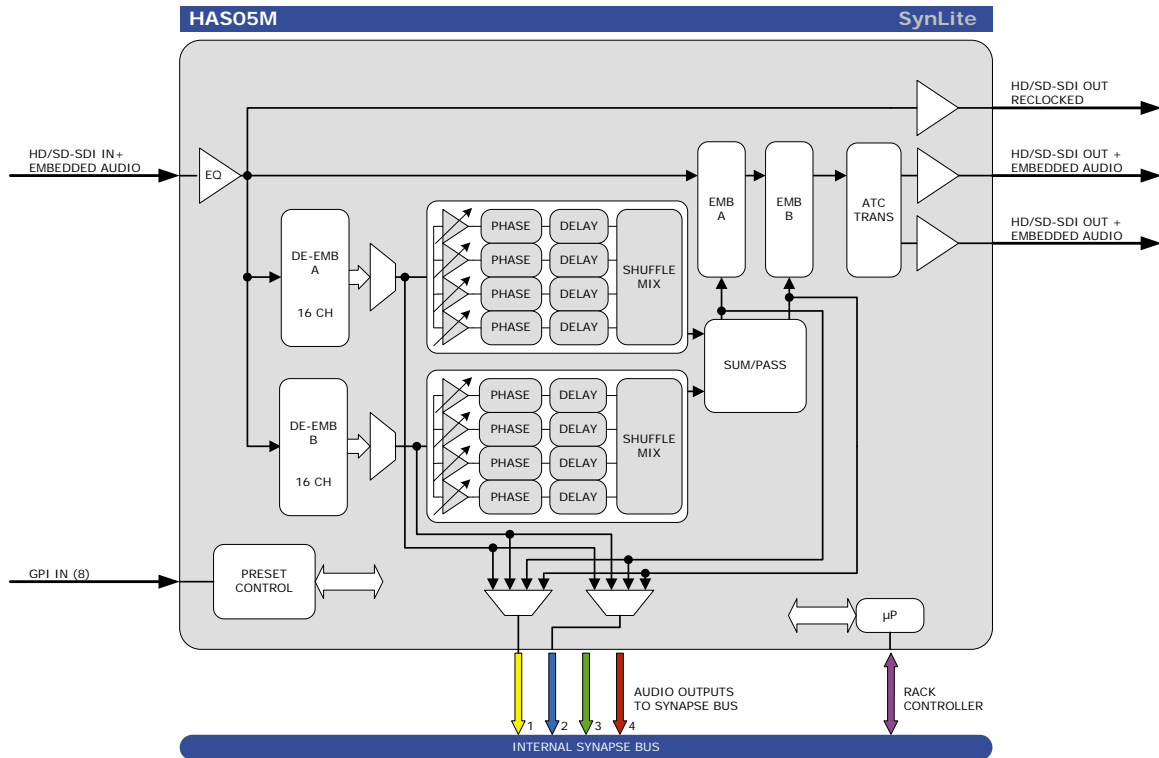
HD
High definition

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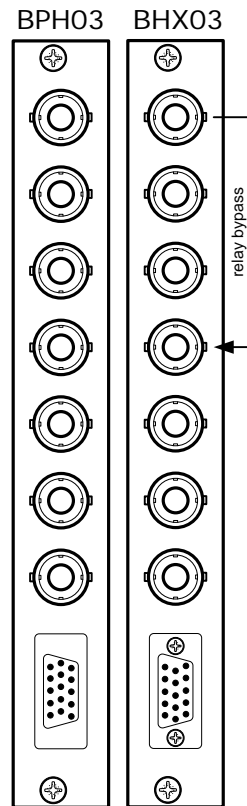
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Block schematic & I/O panel



- HD/SD SDI INPUT (OPTIONAL FIBER INPUT)
- RELOCKED OUTPUT
- PROCESSED OUTPUT 1
- PROCESSED OUTPUT 2 (OPTIONAL FIBER OUTPUT)
- GPI INPUTS (PRESETS)



Features

The HAS05M is an 8 channel in 2 group preset based HD/SD-SDI embedded audio shuffler/mixer. AXON is an industry first with this comprehensive card, and puts full audio control power in to the hands of an HD-SDI embedded signal user. Individual gain, phase and delay control for each channel are also part of this powerful card. The preset based control of this card makes it ideal for repeated corrections or standard channel swapping occasions in a multi lingual environment. If dynamic control is required the card can still perform this task as every preset is remote controllable by a third party control protocol or our dedicated control panel SCP08.

- HD-SDI and SD-SDI compatible (functional equivalent to SD is SAS30)
- Mix between 2x 4 channel shuffle/mix or 1x 8 channel shuffle/mix
- 8 channel selection (any 8 out of 16)
- 8 presets (GPI or ACP controlled)
- Dual 4 channel mix (group) with the option to add 4 channels into 1
- Pre and post monitoring with ADD-ON Card
- Audio input gain (0.25dB steps)
- Audio input phase (0 – 180 deg)
- Audio peak detection
- Audio input delay offset (0 to 2600 ms)
- Transparent for ATC time code RP188, RP196, RP215
- Locks to SDI input
- Full control and status monitoring through the front panel of the SFR04/SFR08/SFR18 frame and the Ethernet port (ACP)
- Optional 1 fiber input (replacing 1 SDI input) or 1 fiber output (replacing 1 SDI output) on I/O panel

Complementary cards:

- DAC20, DAC24, DAS24, DIO48, DIO24, DLA44, DLA43

Applications

- Ingest audio channel correction (HD)
- Preset based play-list audio shuffling
- OB Van audio shuffling with job determined presets

Ordering information

Module:

- **HAS05M:** HD/SD 8-channel 2-group embedded audio processing card with presets

Standard I/O:

- **BPH03_HAS05M:** I/O panel for HAS05M

Relay bypass I/O:

- **BHX03_HAS05M:** I/O panel for HAS05M with relay bypass

Fiber outputs:

- **BPH03T_FC/PC_HAS05M:** I/O panel for HAS05M with fiber transmitter on FC/PC
- **BPH03T_SC_HAS05M:** I/O panel for HAS05M with fiber transmitter on SC

Fiber inputs:

- **BPH03R_FC/PC_HAS05M:** I/O panel for HAS05M with fiber receiver on FC/PC
- **BPH03T_SC_HAS05M:** I/O panel for HAS05M with fiber receiver on SC

Specifications

HD/SD 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 1080i/59.94, 1080i/50, 720p/59.94, 720p/50 |
| Equalization | Automatic to 100m @ 1.5Gb/s with Belden 1694A or equivalent cable. |
| Return Loss | > 15dB up to 1.5GHz |

HD Serial Video Output

| | |
|---------------------------|---|
| 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 1080i/59.94, 1080i/50, 720p/59.94, 720p/50 |
| Signal Level | 800mV nominal |
| DC Offset | 0V \pm 0.5V |
| Rise and Fall Time | 200ps nominal for HD, 750ps nominal for SD |
| Overshoot | < 10% of amplitude |
| Return Loss | > 15dB up to 1.0Gb/s, > 10dB up to 1.5Gb/s |
| Wideband Jitter | < 0.2UI |

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 | <7 Watts |