Marian Trace 8, Trace Alpha & Trace Pro

It’s a tough market out there for PCI soundcards. ROB JAMES turns a critical eye on a German trio to see if they have what it takes to survive...

Just a few years ago, the market was full of PC soundcards. Many have fallen by the wayside and the survivors now fit into three loose categories. At one extreme is the ‘domestic’ variety that scarcely offer more than the facilities built into the majority of motherboards. On-board sound has seen vast improvements with multichannel analogue outputs for surround sound and digital coaxial and / or Toslink optical both for SPDIF stereo and multichannel streaming outputs to feed external Dolby and DTS decoders. At the high end lie cards with impressive audio specifications and professional interfacings. In the middle ground, only the fittest survive. Headline prices and profit margins have fallen and it is to the credit of the manufacturers that the quality of cards in this segment is so high and continuously improving. German manufacturer Marian has been active in this market for ten years or so but the name is not particularly well known, at least in the UK. I received three of its most recent cards for this review.

All three cards are in Marian’s Trace series and all offer sampling at up to 24-bit, 192kHz, with DSP mixing and routing. Like the Marian MARC cards, one of the virtual virtues of the Trace range is modularity. You can add as many cards as you have PCI slots for and synchronise them using Marian’s Syncbus or Syncbus TDM (Time Division Multiplex) connector. Apart from sync signals, Syncbus TDM also carries up to eight channels of audio.

The entry-level card in the range is the Trace Alpha (UK£101.28 + VAT). Like the other Trace cards, this is a bus-mastering half-length PCI card. It features two channels of balanced analogue I-O via 1/4-inch TRS jacks mounted on the card bracket, plus digital stereo coaxial SPDIF. There is also an alternative internal connection for a CD drive, three channels of MIDI output plus one MIDI input connector via a 15-pin Sub-D compact, and a supplied breakout cable terminating in the traditional five-pin MIDI sockets. Analogue inputs can accept a maximum of +18dBu and maximum output is +18dBu. 0dBFS input levels are switchable between +18dBu, +15dBu, +8dBu and -6dBV and output levels between +18dBu, +8dBu and -6dBV. All of these are selected via on-board DIP switches. The Alpha can be clock master or synchronise to another Marian card via the TDM Syncbus.

The Trace Pro (UK£245.96 + VAT) offers the same number of channels, but in professional formats and without the MIDI connectivity. This time the audio I-O is on D-Sub connectors with XLR breakout cables supplied. The AES-EBU digital connector is a 9-pin plug, the analogue a 15-pin, and sample-rate conversion is available on the AES-EBU input. Analogue inputs can accept a maximum of +18dBu and maximum output is +18dBu. 0dBFS input levels are software switchable between +18dBu, +15dBu, +8dBu and -6dBV and output levels between +18dBu, +8dBu and -6dBV. Word clock/Superclock input is courtesy of a BNC on the card bracket. At first glance the Pro may seem expensive compared to the others, but this is a competitive price for a card equipped with a decent sample-rate convertor.

For multichannel analogue I-O there is the Trace 8 (UK£237.45 + VAT). The eight channels of analogue I-O are connected to the card via a 44-pin Sub-D compact. As with the Trace Alpha, the three MIDI outputs plus one MIDI input connect via a 15-pin Sub-D compact and breakout cable. The audio breakout cable connections terminate in 1/4-inch TRS jacks, with five-pin plugs for the MIDI connections. Inputs can accept a maximum of +18dBu (balanced) or +21dBu (unbalanced), and maximum output is +15dBu (balanced) or +9dBu (unbalanced); switching is automatic depending on whether the connection is balanced or unbalanced. While these figures are likely to prove adequate for most purposes, it is worth noting that they are a little low and that some equipment operates at up to +24dBu. Word clock/Superclock input is an optional extra, connecting via two ‘jumper pins’ on the board.

Marian’s documentation is of a high standard with plenty of hand-holding for those who need it and advanced information for the more experienced. Installation is, as it should be, a doodle. Windows XP drivers support MME, ASIO 2.0, GSIF 2.0, WDM-Audio and DirectSound, but as yet there are no Windows Vista drivers. The driver also installs a Mixer, Output Controller, and a so-called ‘States’ window showing the status of the Word clock, Syncbus and digital input connections, along with a Settings dialogue box. With two or more Marian cards in a system, you need to define which is the clock master and which are slaves on the General page of the settings dialogue. Here you will also find a 75Ω termination option for the last card in the chain.

On analogue inputs the gain ‘knob’ adjusts analogue gain before the A-D convertors. Aux sends are a feature of the mixer; the number available varies depending on mode and card. Thus at 44.1kHz/48kHz you get a maximum of six, at 96kHz there are two, and at 192kHz none! The mixer also functions as a router, patchbay and splitter for internal and external sources and destinations. Up to four stereo signals can be routed between cards connected to the TDM Syncbus so you can use one card as dedicated I-O to an external effect or effects, and make this available to all other applications and cards.

Both the Alpha and 8 come bundled with Samplitude SE. Samplitude has always been my favourite native processing multitrack DAW and it works well with the Marian cards.

In all, Trace is an appealing series of cards. The TDM Syncbus means upgrading doesn’t render existing cards obsolete, although the 8-channel intercard maximum may be limiting for some applications. The figures are good and sound plausible subjectively, while latency is very low and can be tuned to suit the system. Analogue input level control is most welcome on products in this price range. All of the Trace series represents good value with the Alpha in particular offering something of a steal, and the five-year warranty inspires a high level of confidence in the products. I look forward to seeing and hearing more of them in the future.

**PROS**
- Low prices; pre-converter analogue level control; versatile range of options; low latency.

**CONS**
- TDM bus limited to eight channels; no Vista drivers yet; maximum analogue levels on Trace 8 somewhat low.

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