Solid State Logic VTE1

Solid State Logic will demonstrate its expanded virtualised System T platform on booth C6907 at this year's NAB Show. By deploying the VTE1 (Virtual Tempest Engine) virtual DSP engine, users can operate with multiple software-based audio processing engines from just a single on-prem hardware server, which can alternatively be used to run all necessary broadcast production processing. Other new features on display for System T Cloud will include a compact DSP pack, NDI (Network Device Interface) and Dante connectivity and an updated licensing model, plus advance showings of the forthcoming TCA Flypack Tour bundle and Version 4.3 System T software.

The move to software-based processing is a major trend in broadcasting that has been highlighted at recent NAB Shows. Solid State Logic is a leader in this transition, which is bringing greater functionality for both cloud and on-prem operations. VTE1 software, which delivers up to 256 processing paths with support for stereo, 5.1 and immersive audio formats, can now be utilised for both public and private cloud or directly on a COTS server.

Whilst enabling a number of customers to deploy advanced broadcast production chains - including System T Cloud - using public cloud infrastructure, Solid State Logic also sees on-prem as a key area, especially with the current trend for hybrid operations. VTE1 offers flexible, scalable working wherever it is deployed, with the possibility for multiple software-based audio engines to run on one server. This reduces the cost of dedicated hardware while, at the same time, supporting a multi-studio set-up. An alternative scenario is utilising shared server hardware for all production software, allowing users to dynamically spin up the tools required for a specific application according to their requirements. This is the basis of the EBU's Dynamic Media Facility (DMF) concept, where a single technical suite can be switched between different uses across the broadcast production chain by simply selecting the relevant software stack. In this way, broadcasters do not have to buy specific processing hardware from different manufacturers, instead taking advantage of a 'best of breed', software-based solution.

The standard VTE1 engine offers up to 256 processing paths and now Solid State Logic is introducing a new, smaller DSP package with 140 paths. This sits alongside the existing 256 path option and is designed for small systems that still demand broadcast-grade audio processing. The feature set is exactly the same as the larger engine, including an integrated Effects Rack, Automix, full processing capability on every path, support for 5.1 and immersive audio (with path formats up to 9.1.6) and on-the-fly, flexible assigning of DSP resources between channel and bus paths as required.

The introduction of short-term, flexible licences alongside the new DSP package make the entry-point to System T lower than ever before. This gives broadcasters the freedom to scale production resources precisely when they need them, without long-term commitments or significant upfront investment. It's an ideal solution for organisations handling temporary, variable or one-off productions.

At NAB 2025, Solid State Logic announced a major update to System T Cloud by adding support for native NDI. This year there will be demonstrations of NDI functionality with direct 'dual-domain' routing of NDI sources from the operational user interface, connecting the source directly through to the channel input or other console destinations in a single action. The system can also simultaneously integrate both NDI and Dante directly and natively. All virtual System T DSP engines can be coupled to any existing System T control surface, ranging from a TCA with a fader tile to a full-scale S500 large-format surface.

New for this year is the TCA Flypack Tour package, which is composed entirely from System T components in a bespoke, compact and portable format engineered for effortless deployment across broadcast, touring and live production environments. Its packaging and form factor make setup simple, whether onsite or 'on-the-road'. The unit features 16 faders, integrated Fader Tile Plus, onboard I/O featuring headphone monitoring and a custom mount for a Tempest Control App PC and touchscreen. Integrated wiring enables rapid, reliable setup with ruggedised Ethercon or Opticon connections to Tempest Engines and I/O.

The system can be split across lightweight flight cases for maximum portability, with the various configurations delivering the full System T experience in a scalable 'travel ready' package that features direct AoIP routing, integrated Effects Rack processing and the ability to operate with modern production workflows, all topped off by Solid State Logic's renowned sonic performance.

There will also be a showcase preview of the upcoming System T V4.3 software release. This includes onboard SolidPitch automatic tuning, permanent path links, additional send buses and an increased number of scenes, up to 500 per show file. Collectively, these additions further enhance System T's capabilities for users working in broadcast, theatre, music and a wide range of corporate or live event applications.

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