

# TC·POWERCORE

THE DSP-TURBO™ FOR YOUR NATIVE AUDIO WORKSTATION



- 5 HI-END PROCESSORS
- 24/96
- TC TOOLS/96K INCLUDED
- WORKS WITH ANY VST APPLICATION
- WORKS WITH ALL SOUND SYSTEMS
- INCLUDES SPARKLE MASTERING SOFTWARE

**TC | WORKS**  
ULTIMATE SOFTWARE MACHINES

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THE DSP-TURBO™ FOR YOUR NATIVE AUDIO WORKSTATION



## WELCOME TO ULTIMATE DSP POWER

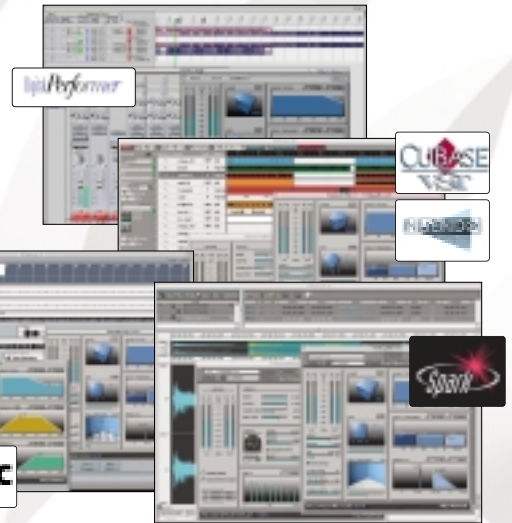
**TC POWERCORE's** signal processing power transforms all VST/MAS-compatible recording environments into professional high performance audio workstations, freeing up precious CPU performance resources.

**TC POWERCORE** employs no less than 5 discrete processors: A PowerPC and 4 Motorola 56K DSPs for an unparalleled performance and flexibility providing up to 24/96 audio and double-precision processing!

## THIS IS THE "TURBO" YOU HAVE BEEN WAITING FOR

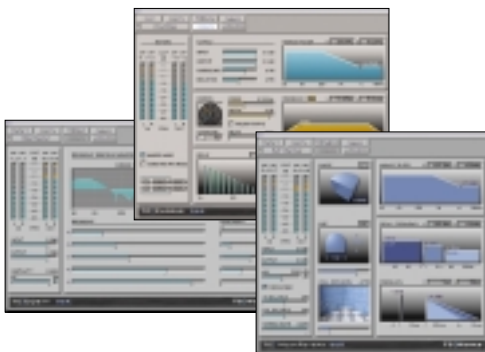
Run 8 studio-quality TC MegaReverbs or other Hi-End **TC POWERCORE** Plug-Ins simultaneously, without reducing your track count or using up all of the computer's available CPU horsepower.

The integration with VST/MAS-compatible software like Cubase, Digital Performer, Spark, Nuendo or Logic is seamless – no proprietary add-on software is required to access the board's audio processing power.



## SUPPORTS ALL I/O SYSTEMS

Get more out of the system you already own – **TC POWERCORE** adds incredible power to your existing work environment: It works with all VST/MAS-capable applications (like Logic, Nuendo, Spark, Digital Performer or Cubase) and any sound system supported by the software. Simply plug in and enjoy!



## TC TOOLS/96K – STUDIO QUALITY FX PACKAGE INCLUDED

**TC POWERCORE** gives you world class Reverb, Modulation FX and EQ right out of the box! The renowned TC TOOLS studio-quality FX package is bundled with the card.

Now TC MegaReverb, TC Chorus/Delay and TC EQSat Plug-Ins are accessible from inside your favorite VST/MAS-compatible recording application – but of course running on the card, not your CPU!

And **TC POWERCORE** has so much processing power, that one complete set of TC TOOLS Plug-Ins (MegaReverb, Chorus/Delay and EQ) only requires one DSP to run! That leaves 3 more DSPs available for other Hi-End FX!

## MAXIMIZE YOUR DSP POWER

With **TC POWERCORE** you don't give up any of your VST/MAS features – you add the reliability and power of a DSP-based system to your native environment. Of course, you can use VST/MAS and **TC POWERCORE** Plug-Ins at the same time – even in the same signal path. The integration is complete, it doesn't make any difference if you are inserting a **TC POWERCORE** or VST/MAS Plug-In – they are even stored in the same folder.

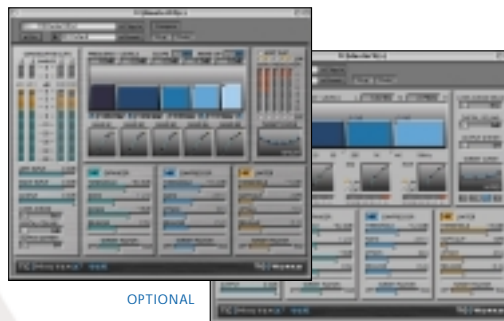


## EXPAND YOUR VIRTUAL RACKS

Of course, **TC POWERCORE** can run a lot more than just the included awesome TC TOOLS/96 Plug-Ins – also available:

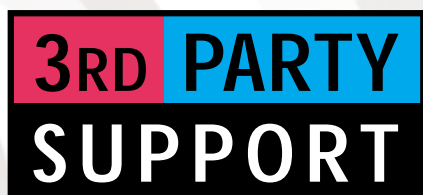
- **TC MASTER X 3+5**, the solution for knockout punch!

The complete solution for multiband mastering processing – from the makers of the industry standard Finalizer Mastering Processor. With your choice of 3 or 5 band Expansion/ Compression/Limiting, accurate metering, dithering – all you need in one easy-to-use Plug-In!



## VST/MAS POWERCORE PLUG-IN SPEC

TC Works' new VST/MAS Powercore Plug-In spec utilizes Steinberg's open VST/MAS Plug-In format as a front-end but streams the audio to the **TC POWERCORE** card for processing. Thanks to using VST/MAS as a starting point and extending the format from there, all Plug-Ins written for the **TC POWERCORE** card will instantly run in any VST/MAS-compatible audio application such as Cubase, Logic, Nuendo, Digital Performer or Spark.



## OPEN DEVELOPMENT PLATFORM

**TC POWERCORE** is an open processing platform – many more Plug-Ins will follow, also by well-known 3rd party developers. TC WORKS doesn't believe in vaporware, so we have decided to not announce that there is "a scent of planned products in the air" by X,Y or Z – you expect reliable information from us, and that's what you're gonna get. So: more details on the companies planning support for the card and their products will follow shortly!

## 2800 MHZ WORTH OF DSP POWER!

**TC POWERCORE** provides more DSP Power than any computer that is currently available. One card supplies the user with 400 DSP MIPS (Million Instructions Per Second) of sheer power. One DSP Instruction, or "cycle", is capable of loading 2 data items, fetching the next processor instruction and performing a combined multiplication and addition (multiply-add) – all at the same time!

A current G4 on the other hand, requires at least 4 – 7 cycles to perform this operation in a best-case scenario – if the data is not in the computer's cache, which is to be expected, the factor is up to 100 times worse. Also, the current CPUs theoretical power is reduced by the relatively slow memory used.



## SPARK LE MASTERING SOFTWARE INCLUDED

SPARK LE is the bundle version of **SPARK**, TC WORKS' FX processing and mastering application for MAC OS. If you only expected a "Lite" version, think again: SPARK LE supports 24/96, VST/MAS Plug-Ins, includes a native mastering limiter, delay line and EQ, realtime crossfades, etc., etc.!

And if you want even more power – an upgrade path to **SPARK** is included as well!





# FEATURES & SPECIFICATIONS

## GENERAL

- 24 bit / 96 kHz (and higher) supported
- Dynamic performance allocation: several processes can share the same DSP
- Turbo Power: 1 process can access up to 2 DSPs
- Future-proof design: no converters
- Hardware cross-platform compatible

## PROCESSORS

- 1 x 8240 PowerPC
- 4 x 56362 Motorola DSPs @ 100 MHz

## SUPPORTED APPLICATION SOFTWARE

- Works with any VST/MAS-compatible application
- Seamless integration, no special version requirements
- Tested applications:
  - Steinberg Cubase VST (and forthcoming Nuendo)
  - Emagic Logic Audio
  - TC Works Spark
  - Motu Digital Performer
  - Bias Peak 2.5

## SUPPORTED I/O CARDS

- Works with all sound cards supported by the host software
- ASIO (MOTU 2408 etc., RME, MIDIMAN, YAMAHA DSP Factory, TASCAM USB 428, ...)
- Digidesign Direct I/O (e.g. Digidesign 001)
- SoundManager (Apple's built-in audio)

## TC TOOLS PLUG-INS

- New Version supporting 96 kHz
- **TC MEGAREVERB:**
  - Hi-End Reverb based on the TC Electronic M5000's Core 1 and 2 algorithms
  - 6 different room types: Hall, Horseshoe, Prism, Fan, Club, Small Room
  - 3-Band Tail with adjustable crossover points
  - True Stereo Processing (with Crossfeed switch)

## • TC CHORUS/DELAY

- Based on the TC Electronic 1210 hardware processor
- Simultaneous Modulation & Delay effect
- Very flexible routing and filtering
- Separate Feedback control for Modulation and Delay block
- Adjustable LFO Phase
- Max. Delay time 500 msec
- Hi shelving Filter with adjustable frequency from 20 Hz to 16 kHz and max. cut - 40 dB
- Analog Saturation Emulation algorithm

## • TC EQ<sup>SAT</sup>

- Mastering quality multiband EQ algorithm
- 5 bands: 3 parametric and 2 shelving bands
- Frequency range from 19.95 Hz to 20 kHz
- Frequency Response Monitor to display the desired versus actual gain change

## SPARKLE SOFTWARE

- 2-Track Mastering & Real-time processing with 32-bit Floating Point accuracy
- Support for 8-, 16-, 20-, 24-bit files with up to 96 kHz resolution
- Support for WAV, AIFF, SDII and all file formats supported by QuickTime
- MP3 Decoding through QuickTime
- User interface with "One Window approach"
- Master Section with precise level meters and up to 4 VST Plug-Ins inserted
- Included Plug-Ins: 1-band EQ, MaxIt Maximizer and Delay Line with BPM input
- Full featured recording dialog
- Project level with file data base
- Realtime sample rate conversion for playback: no hassle with I/O hardware limitations
- Waveform Editor with waveform drawing and instant zooming
- Off-Line processes: Fades, Change Gain, Normalize, Trim/Silence, Reverse, Invert, Resample
- File Export with Add Tail Feature
- Numerical Play List with realtime crossfades
- CD-Play List creation and Play List Export
- CD burner support via direct Link to Adaptec Toast or Jam
- Export of Play Lists into Adaptec Jam compatible image files



System requirements: G3 or G4 PowerMac with PCI slots, 128 MB RAM, MacOS 9, VST/MAS-compatible recording software and compatible sound system.

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