



CALICO | PRO

VIDEO PROCESSORS

PERFORMANCE
THAT SCALES
WITH YOUR VISION



PRODUCT BROCHURE

CALICO | PRO

A REVOLUTION, NOT AN EVOLUTION

CALICO takes its name from a neutral woven textile that provides a versatile base for dyeing and printing with high-quality colors. The process reflects the CALICO mission to provide a family of trusted solutions that enable users to display and manipulate video in equally creative ways.

This fifth generation, proprietary, processing engine is developed solely by tvONE and leads the way for innovation in video processing technology delivering visibly enhanced image fidelity, improved color rendition and even more video processing flexibility.



FOUR DECADES OF ENGINEERING CONFIDENCE

Here at tvONE, we are proud of our strong legacy of technical innovation, and we look ahead to even more significant contributions to the professional AV industry. We remain committed to developing state-of-the-art technology, which continues to move the industry forward and instill confidence in its users.

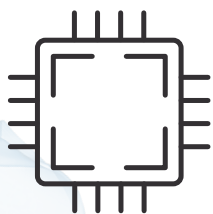
Our in-house research & development team is dedicated to developing and deploying reliable, top performance technology. Our fifth-generation, proprietary, processing engine, CALICO, transcends other solutions, providing visibly enhanced image fidelity and even more video processing flexibility for all your needs today and in future.

DEMAND VISUAL PERFECTION

THE CALICO DIFFERENCE

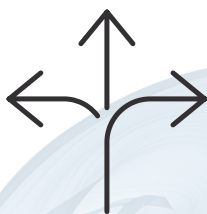
CALICO is a revolutionary video processor with access to hundreds of video windows and industry leading, ultra-low latency, 4K60, 10-bit image processing and HDR support, creating a new standard in video processing technology.

CALICO PRO enables the most complex, multi-window workflows in the market.



IMMENSE PROCESSING POWER

CALICO provides unrivaled processing power, with huge creative design canvasses delivering high resolution, high quality video. Hundreds of video layers can be added to deliver “big data” and “big video” across a wide range of markets and industries.



FLEXIBLE FEATURE SETS

Off-the-shelf video scalars cannot adapt to new markets or standards. With CALICO technology, it's easy to add or change features providing total flexibility to give the customer exactly what they want.



BUILT TO LAST

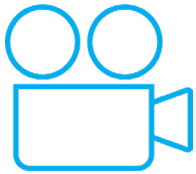
Built for demanding, professional applications, CALICO is built to last and grow with the customers' needs to provide guaranteed “obsolescence insurance.” We stand behind our superior quality by offering an industry leading parts and labor warranty.

CALICO PRO TECHNOLOGY

Building upon our strong heritage of delivering the highest image fidelity, we have taken this philosophy a step further with exquisite up/down/cross conversion and video standards conversion for the ultimate management of various resolution sources and displays.

Capable of end-to-end 4:4:4 processing, combined with the highest quality conversions between 4:2:0, 4:2:2 and 4:4:4 color spaces, makes CALICO the most innovative and flexible technology on the market.

CALICO PRO support up to 128 million pixels with standard or custom resolutions to implement LED with total precision including 30bit True Color.



10-BIT VIDEO PROCESSING

Visibly better! Incredible image fidelity comes as standard with our fifth-generation processing engine.



INCREDIBLE BANDWIDTH

Move and manipulate massive amounts of video without compromise with gigapixels of raw processing power.



WINDOWING & STACKING

Display your sources how you want them. CALICO PRO delivers more windows, keys, and labels than you will ever need.



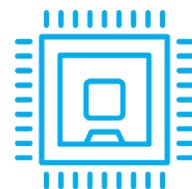
IMPERCEPTIBLE LATENCY

However complex your set up, CALICO PRO delivers your content from source to display in typically one frame.



PARALLEL PROCESSING

CALICO PRO delivers massive processing without any bottlenecks to handle large data management without loss of image fidelity.



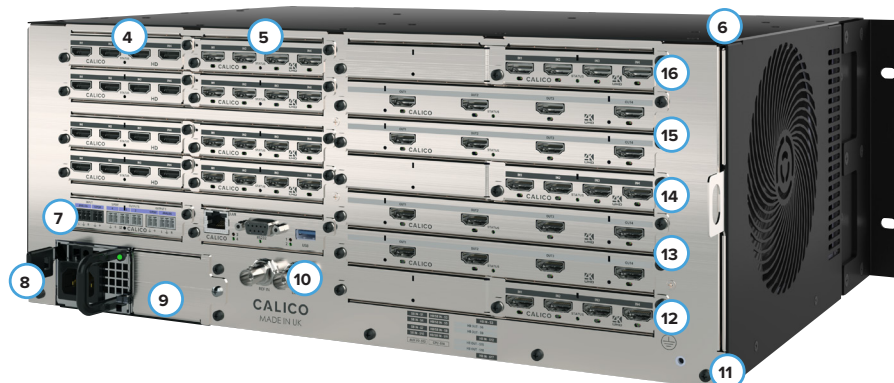
FPGA EXPERTS

Where CALICO PRO needs hardware, we use FPGA not GPU to enable ultimate reconfiguration and customization.

10-BIT VIDEO PROCESSORS

4RU CALICO PRO

The **4RU CALICO PRO (C7-PRO-4200)** is the largest, most powerful and most expandable model in the CALICO PRO family. Its fully modular architecture allows you to build the exact system you need, with configurations supporting up to 36 × 4K60 inputs and 16 × 4K60 outputs all without compromise.



1. Rack Ears
 2. Information Display
 3. Large fans for quieter operation
-
4. Four standard bandwidth input module slots
 5. These slots can accept standard or high bandwidth input modules
 6. On-board storage for images and labels
 7. Optional audio module
 8. Included field replaceable PSU
 9. Optional dual redundant hot swappable PSU
 10. Reference and loop
 11. Integrated, removeable, stainless steel air filter
 12. High bandwidth input module slot
 13. High bandwidth output module slots
 14. High bandwidth input module slot
 15. High bandwidth output module slots
 16. High bandwidth input module slot

Optional High Bandwidth Output Modules

- 4 x 4K60/1080p120 HDMI
- 8 x 1080p60 HDMI
- 4 x 12G-SDI

Optional Input Modules

- 2 x 4K HDMI input
- 2 x 4K/1080p HDMI Media & Streaming
- 2 x 4K HDBaseT
- 4 x 1080p60 HDMI
- 4 x 3G-SDI
- S/PDIF & Analog Audio

Optional High Bandwidth Input Modules

- 4 x 4K60/1080p 120 HDMI
- 4 x 12G-SDI

Input

44 x Full HD Inputs
-OR-
 4k inputs
 (28x 4K60 +
 8x 4K30 inputs)

Windows/Layers
 256

Output

32 x Full HD
-OR-
 16 x 4K60

CALICO | PRO

CREATIVITY WITHOUT LIMITATIONS

Building upon our strong heritage of delivering the highest image fidelity, we have taken this philosophy a step further with exquisite up/down/cross conversion and video standards conversion for the ultimate management of various resolution sources and displays.

Capable of end-to-end 4:4:4 processing, combined with the highest quality conversions between 4:2:0, 4:2:2 and 4:4:4 color spaces, makes CALICO PRO the most innovative and flexible technology on the market.

The first product family using this award-winning processing engine is CALICO PRO which can support up to 128 million pixels with innovative Output Mapping to implement LED with total precision including 30bit True Color.

The CALICO PRO Video Processors have been designed from the ground up to achieve superior results for computer graphics, broadcast sources, IP Streams, still images and multimedia clips at their native resolution, supporting up to 4K now and 8K in the future.

Our mission is to deliver the highest quality, accurate and visually realistic processing of any video irrespective of aspect ratio or resolution, utilizing our propriety 10-bit video processing. We aim to ensure that no detail is lost in preserving full motion video and image stills from source to display with guaranteed visual perfection right down to pixel level.

2RU CALICO PRO

The **CALICO PRO (C7-PRO-2200)** is a desktop or rack mountable 2RU video processor that ships with an I/O configuration of eight 4K60 HDMI 2.0 inputs and four 4K60 HDMI 2.0 outputs as standard with the option to additional I/O modules.



1. Removeable rack ears
 2. Information display
 3. Handles
-
4. USB 3.0 interface
 5. 4K60 HDMI 2.0 HDCP 2.2 outputs
 6. 4K60 HDMI 2.0 HDCP 2.2 inputs
 7. Reference and loop
 8. Included field replaceable PSU
 9. 131 million pixels (4U)
 10. On-board storage for image and labels

Optional High Bandwidth Output Modules

- 4 x 4K60/1080p120 HDMI
- 8 x 1080p60 HDMI
- 4 x 12G-SDI

Optional Input Modules

- 2 x 4K HDMI input
- 2 x 4K/1080p HDMI Media & Streaming
- 2 x 4K HDBaseT
- 4 x 1080p60 HDMI
- 4 x 3G-SDI
- S/PDIF & Analog Audio

Optional High Bandwidth Input Modules

- 4 x 4K60/1080p 120 HDMI
- 4 x 12G-SDI

AURASYS

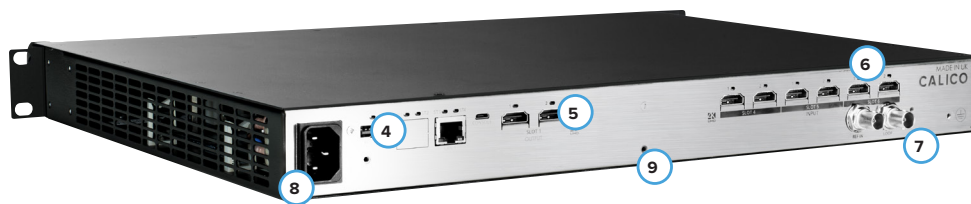
10-BIT VIDEO PROCESSORS

1RU CALICO PRO

The most compact member of the **CALICO PRO family (C7-PRO-1200)**, this 1RU 10-bit video processor has a fixed configuration of six 4K60 HDMI 2.0 inputs and two 4K60 HDMI 2.0 outputs.



1. Removeable rack ears
2. Information display
3. Handles



4. USB 3.0 interface
5. 4k60 HDMI 2.0 HDCP 2.2 outputs
6. 4k60 HDMI 2.0 HDCP 2.2 inputs
7. Reference and loop
8. Internal PSU
9. On-board storage for image and labels

UNDER THE HOOD

CALICO technology delivers innovative features, seamlessly integrating cutting-edge advancements such as seamless source management, color depth, and robust content management to deliver an enhanced user experience.



UNRIVALED BANDWIDTH

CALICO is optimized for unrestricted, uncompressed, end-to-end performance even when working with 4K60 video. Using patented tvONE technology, CALICO delivers high data rate video processing levels combined with both physical and IP friendly workflows.

8-BIT
16.8 MILLION COLORS

10-BIT
1.07 BILLION COLORS

SUPERIOR COLOR DEPTH

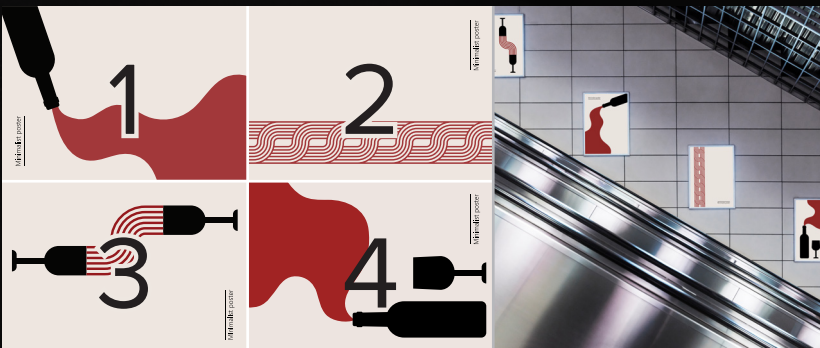
CALICO offers class-leading 10-bit processing for accurate reproduction of even the finest image details. Enjoy accurate color reproduction for correct branding and to enable HDR workflows.

SDR

HDR

SEAMLESS HDR MANAGEMENT

CALICO supports multiple HDR standards and can seamlessly convert from one to another. It is simple to re-format SDR into HDR video, or vice-versa, removing many technological barriers to superior color.



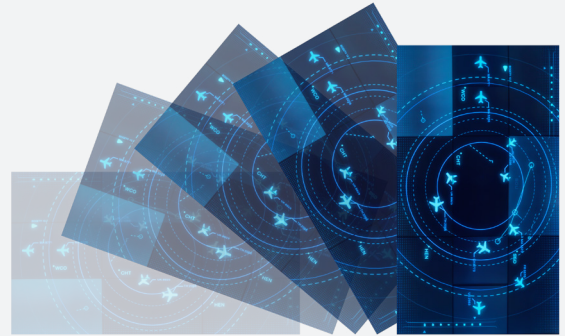
FLEXIBLE SOURCE CROPPING

Easily manipulate multiple crops from the same source and use these as separate windows to easily manage your content, maximize your input efficiency and to reduce cabling requirements.



KEYING

Enhance the viewer experience with real-time keying to add logos and build your brand.



SOURCE & OUTPUT ROTATION

Both source windows and outputs can be freely rotated from 0° through to 360° (accurate to two decimal places) allowing ultra creative display set ups.



HUNDREDS OF LAYERS

CALICO PRO offers more layers than you will ever need within an extremely flexible, and easy to set up, stack-based management system allowing for interchangeable 4K and HD resolution layers.



FLEXIBLE CONTROL OPTIONS

CALICO PRO integrates with all major automation systems, adds DMX control, and now supports Stream Deck for effortless, tactile operation. Download our free API from www.api.tvone.com to create custom, secure, RESTful control solutions.



SIMPLIFIED OPERATION

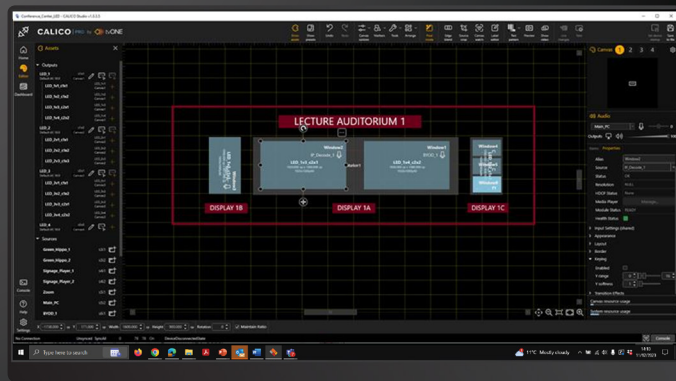
CALICO PRO guarantees pixel perfect and visually stunning content every time with fully customizable selection of the highest quality video.



EDID MANAGER

Poor EDID implementation can lead to frustrations with device synchronization. CALICO PRO automatically manages EDID communications with additional support for non-standard or unique EDIDs with the integrated EDID manager.

CALICO | STUDIO



POWERFUL AND EASY TO USE SETUP AND CONTROL SOFTWARE

CALICO Studio is the highly intuitive, powerful design software for CALICO PRO. It is easy to configure single or multiple outputs for Direct View LED or create extensive projector edge blends and display walls – you choose! Position and rotate sources and displays with complete freedom and 360° rotation, including borders, dissolves, fades, and animations. Optimized for complex LED set ups, CALICO Studio offers customizable grid lines and snapping tools together with markers and labels for easy asset identification.



Derrick Rubin

POWERFUL LABELLING ENGINE

Identify and inform your audience with prominent, customizable labels. Create text labels, source text labels, image labels, live source, timecode labels, and save them as label templates and apply as you wish. Also labels can be parented to a source for seamless source switching and transition.



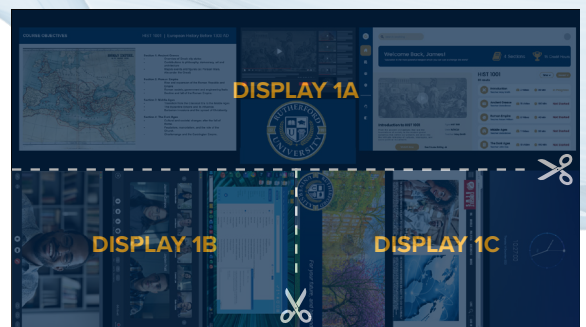
CANVAS WATCH

Easily monitor your expansive LED, edge-blended projection, or display set-ups with ease for complete peace of mind. Watch multiple layouts from any canvas using a single display or multiple displays. Combine with output mapping to deliver multiple watched areas to a single display.



INPUT MAPPING

With CALICO PRO, easily cut multiple sections from any source, take individual web page elements and reposition them on your canvas or for a small control room, split multiplexed camera feeds in to individual camera views.



OUTPUT MAPPING

LED controllers work best with standard resolutions. CALICO PRO can reposition pieces of a display in a real-world view, ready to place your content in a visually correct position, CALICO then automatically re-package a single output ready for the LED wall controller. Maximize your CALICO output, remove complex cabling, and the need for multiple LED controllers.



Patented video processing
FPGA based system
More efficient, **more** flexible
Expandable product architecture

CALICO

CUSTOM AND OEM PRODUCTS

If your company has a unique application that could benefit from CALICO technology, we are experienced in providing custom products. Please contact us for more information and to discuss your requirements.

WANT TO KNOW MORE?

To discuss CALICO for any of your future installations, please contact your regional sales manager. Get in touch today!