

SOLVING COMPLEX VIDEO CHALLENGES

SMPTE ST 2110

Developer tools VideoMaster

100GbE Video graphics Jetson

SDI AI Overlays Keyer

HDMI™ Unified SDK 4K 8K

Custom design RDMA DPDK

Ultra-low latency

ABOUT DELTACAST

Born from the TV broadcast industry, DELTACAST is a leader in the design, development and manufacturing of live video transport and processing solutions for OEMs and developers. Our solutions deliver the highest quality and the lowest latency to serve the most demanding applications in TV broadcasting, ProAV industry, medtech, aerospace and many other markets.



The quality management system developed by DELTACAST fulfills the requirements of the ISO 9001:2015 standard

DELTA^ΔCAST

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Interfacing is our work



Premium support



100% under your control



Quality excellence



LIVE VIDEO TRANSPORT & PROCESSING SOLUTIONS

DELTA^ΔCAST

VIDEO SOLUTIONS FOR DEVELOPERS

INNOVATIVE SOLUTIONS

AI IMAGE PROCESSING

(SDI/HDMI/ DisplayPort)

- ▶ Real-time 4K overlays
- ▶ **Automatic failover** with passive bypass to preserve video signal in
- ▶ RDMA and ARM platforms support



IP SMPTE ST 2110 & IPMX

Expertise in IP and ready-to-use modules
ST2110, DPDK kernel bypass, PTP, NMOS



- ▶ ST 2110 software ingest and playout on standard NICs
- ▶ Part of the unified VideoMaster SDK
- ▶ Up to 4K and more with very low CPU consumption
- ▶ Support for ST 2110-20 (uncompressed video), -22 (compressed streams -JPEG XS), -30 (audio), -40 (ancillary data)
- ▶ Redundancy (ST 2022-7)
- ▶ Advanced performances with DPDK kernel bypass
- ▶ Virtualization ready

ULTIMATE LOW-LATENCY

- ▶ The shortest way to real-time
- ▶ Software defined ultra-low latency
- ▶ Sub-frame video-in to video-out

HIGH I/O DENSITY



- ▶ Connect up to 32 I/O on a single PCIe slot
- ▶ External I/O modules for SDI, HDMI 2.0 and DisplayPort 1.2
- ▶ Frame accurate synchronization
- ▶ Up to 32x HD – 8x 4K
- ▶ Rack-mount design

100% UNDER YOUR CONTROL

VIDEOMASTER SDK

- ▶ Supports all DELTACAST video cards
- ▶ Unified framework with dedicated features for SDI, IP, HDMI, DVI, DISPLAYPORT and ASI
- ▶ Ultimate Low Latency with sub-frame access
- ▶ C/C++ API
- ▶ Drivers for Windows and Linux PC computers, MacOS, and ARM platforms
- ▶ NVIDIA GPUDirect RDMA support



FREE SOFTWARE APPLICATIONS AND DOCUMENTATION

- ▶ Comprehensive documentation
- ▶ dCARE: All-in-one test bench for your DELTACAST cards

OPEN-SOURCE SAMPLES



THIRD PARTY FRAMEWORKS



TAILORED TO YOUR NEEDS

CUSTOM DESIGN

Electronics, software & mechanics

Flexible OEM building blocks

Integration into a plethora of video applications

Custom firmware for any of our boards



PREMIUM SUPPORT

First-class technical support by email, or even by phone in case of critical needs.

- ▶ Video cards: included
- ▶ Software: part of DELTA-care

INTERFACING IS OUR WORK



SDI

- ▶ More than 15 different models
- ▶ From 1 to 12 configurable in/out
- ▶ From SD to 8K
- ▶ SD/HD/3G/6G/12G-SDI
- ▶ Multi-link 4K and 8K transport in quadrants and in 2SI mode
- ▶ BNC, DIN or HD-BNC connectors
- ▶ HDR formats support
- ▶ Input synchronization, output genlocking
- ▶ Onboard LTC reference input, or through LTC optional module
- ▶ Automatic failover on some models



IP SMPTE ST 2110

- ▶ 2 x 10GbE ports via SFP+
- ▶ ST2110 and ST2022-5/6 stream capture and playout
- ▶ ST2022-7 - Seamless Protection Switching
- ▶ Mezzanine compression for 4K support
- ▶ Unicast and Multicast IGMP
- ▶ PTP support



HDMI™ / DISPLAYPORT™ / DVI

- ▶ HDMI™ 2.0 600 MHz TMDs clock
- ▶ HDMI video formats up to 4K60
- ▶ Audio capture
- ▶ High frame rate HD (up to 120Hz)
- ▶ HDR formats support
- ▶ 2 inputs
- ▶ Low-profile form factor
- ▶ DisplayPort and DVI support



MIXED VIDEO INTERFACES

- ▶ SDI, HDMI and DVB-ASI video interface
- ▶ Capture and playout low-profile card

