DaVinci™ Processors: Tuned for Digital Video End Equipments

<table>
<thead>
<tr>
<th>DaVinci Processor</th>
<th>CPU</th>
<th>MHz</th>
<th>Capture/Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM355</td>
<td>ARM926**</td>
<td>135, 216, 270 MBs</td>
<td>Capture/Display</td>
</tr>
<tr>
<td>DM6467**</td>
<td>C64x+/ARM926™</td>
<td>594/297</td>
<td>Capture/Display</td>
</tr>
<tr>
<td>DM647</td>
<td>C64x+</td>
<td>720, 900</td>
<td>Capture/Display</td>
</tr>
<tr>
<td>DM648</td>
<td>C64x+</td>
<td>720, 900</td>
<td>Capture/Display</td>
</tr>
<tr>
<td>DM6446*</td>
<td>C64x+/ARM926™</td>
<td>800/300</td>
<td>Capture/Display</td>
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<tr>
<td>DM643</td>
<td>C64x+/ARM926™</td>
<td>800/300</td>
<td>Display</td>
</tr>
<tr>
<td>DM6441*</td>
<td>C64x+/ARM926™</td>
<td>512/256</td>
<td>Capture/Display</td>
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<td>DM6437</td>
<td>C64x+</td>
<td>400, 500, 600 MBs</td>
<td>Capture/Display</td>
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<tr>
<td>DM6435</td>
<td>C64x+</td>
<td>400, 500, 600 MBs</td>
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<td>DM6433</td>
<td>C64x+</td>
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<td>Display</td>
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<td>DM6431</td>
<td>C64x+</td>
<td>300</td>
<td>Capture</td>
</tr>
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</table>

*Includes video imaging co-processor
**Includes MPEG-4/JPEG co-processor
†Includes DaVinci High-Definition video/imaging co-processors

DaVinci™ Technology Overview

DaVinci technology is a signal processing-based solution tailored for digital video applications that provides video equipment manufacturers with integrated processors, software, tools and support to simplify the design process and accelerate innovation.

DaVinci Processors Reduce System Cost

The portfolio of DaVinci processors consists of scalable, programmable signal processing system on chips (SoCs), accelerators and peripherals, optimized to match the price, performance and feature requirements for a broad spectrum of video end equipments. The DaVinci technology portfolio includes:

- **TMS320DM644x digital media processors** – Highly integrated SoCs based on an ARM926 processor and the TMS320C64x+™ DSP core. The TMS320DM6446, TMS320DM6443 and TMS320DM6441 processors are ideal for applications and end equipments such as video phones, automotive infotainment and IP set-top boxes (STB).

- **TMS320DM646x digital media processors** – Based on the C64x+™ DSP core, the TMS320DM6437, TMS320DM6435, TMS320DM6433 and TMS320DM6431 processors are ideal for cost-sensitive applications and include special features that make them suitable for automotive market applications such as lane departure and collision avoidance, as well as machine-vision systems, robotics and video security.

- **TMS320DM647/TMS320DM648 digital media processors** – Optimized for multi-channel video security and infrastructure applications, including digital video recorders (DVRs), IP video servers, machine-vision systems and high-performance imaging applications. The DM647 and DM648 digital media processors are fully programmable and offer industry-leading performance for the most demanding streaming multimedia applications.

- **TMS320DM6467/TMS320DM6468 digital media processors** – DSP-based system-on-chips (SoCs) specifically tuned for real-time, multi-format, HD video transcoding at 10× the performance and 1/10th the price. The DM6467 consists of an integrated ARM926EJ-S core, C64x+ DSP core, High-Definition Video/Imaging Co-Processors (HD-VICP), video data conversion engine and targeted video port interfaces. The DM6467 is specifically designed to address the HD transcoding challenge for commercial and consumer markets, such as media gateways, multi-point control units, digital media adaptors, digital video servers and recorders for the security market and IP set-top boxes.

- **TMS320DM6335 digital media processors** – Include an integrated video processing subsystem and an ARM926 processor at clock speeds of 135, 216 or 270 MHz. The DM335 processor is optimized for targeted end equipments such as video-enabled universal remote controls, Internet radio, e-books, video doorbells and digital telescopes. The DM335 processor is a low-cost, low-power processor providing advanced graphical user interface for display applications that do not require video compression and decompression.

- **TMS320DM355 digital media processors** – Include an integrated video processing subsystem, an MPEG-4/JPEG co-processor plus an ARM926 processor and is available in clock speeds of 135, 216 or 270 MHz. The DM355 is optimized for targeted end equipments such as video doorbells, baby monitors, digital cameras and wireless IP network cameras. Driving the market growth for next-generation, portable, high-definition (HD) video products, this digital media processor provides HD video performance and double the battery life of today’s comparable portable products.

Targeted Applications/End Equipments

- Automotive infotainment
- Automotive vision
- Digital cameras
- Digital media adaptor
- Digital photo frames
- Digital telescope
- Digital video recorders
- E-books
- Internet radio
- IP network cameras
- IP set-top boxes
- Machine vision
- Media gateways
- Medical imaging
- Multi-conferencing units
- Portable media players
- Robotics
- Video broadcast transcoding
- Video conferencing
- Video doorbells
- Video-enabled universal remote controls
- Video infrastructure
- Video phones
- Video surveillance
- DVRs/DVS and many more

Getting started is easy! See available development tools and software beginning on page 2.
eXpressDSP™ Digital Media Software Simplifies Development and
Reduces Design Time

eXpressDSP Digital Media Software

to simplify development and reduce cost in your digital media application, a complete portfolio of eXpressDSP-compliant digital media software is now widely available. TI digital media software is:

- Production tested for easy integration into audio, video and voice applications
- Optimized to support DaVinci™ technology-based digital media processors, TMS320C6000™ and TMS320C5000™ DSP platforms
- Designed to meet the needs of engineers by allowing them to focus on product differentiation instead of codec development
- Available via free 60-day evaluation with multiple licensing options
- Fully supported by Authorized Software Providers (ASPs) that give customized technical support

Available Codecs

<table>
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<tr>
<th>Codec</th>
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<td>AC3</td>
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Customized Technical Support for eXpressDSP Digital Media Software Provided by Authorized Software Providers

To ensure extensive and qualified support, TI has established a worldwide network of Authorized Software Providers (ASPs) that offer support for TI-enabled IP and customized software and engineering services. ASPs provide four hours of free support during the free 60-day evaluation stage and up to 40 hours during application development.

For more information on ASPs, please visit www.ti.com/asp.

Authorized Software Providers by Region

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<tr>
<th>ASPs</th>
<th>Americas</th>
<th>Europe</th>
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</table>
TMS320DM644x Digital Media Processors

TMS320DM644x digital media processors are highly integrated SoCs based on an ARM926 processor and the TMS320C64x™ DSP core. They are ideal for applications such as video phones, automotive infotainment and IP STBs.

For more information, visit www.ti.com/dm644x

Development Tools for TMS320DM644x Processors

For Evaluation:

Description | Part Number | S.U. 1
--- | --- | ---
TMS320DM644x Digital Video Evaluation Module (OEVMM) 2 | TMDSVM6446 (U.S. part number) | 2,495
Code Composer Studio™ IDE 3 | TMDSCCSALL-1 | 3,595
Blackhawk XDS506™ JTAG PC Emulator (optional) | TMDSM560PCI | 2,995
Blackhawk XDS560 JTAG USB Emulator (optional) | TMDSM560USB | 2,999

For Production:

Digital Video Software Production Bundle (DVSPB) 2: MontaVista Pro Software and TDI DVSDK, CSStudio IDE, + XDS560R Emulator | TMDSVPSPAB-4L | 6,995
Code Composer Studio IDE 3: | TMDSCCSALL-1 | 3,595
Blackhawk XDS560 JTAG PC Emulator (optional) | TMDSM560PCI | 2,995
Blackhawk XDS560 JTAG USB Emulator (optional) | TMDSM560USB | 2,999

1 Prices are quoted in U.S. dollars and represent year 2008 suggested resale pricing. All prices are subject to change. Customers are advised to obtain the most current and complete pricing information from TI prior to placing orders. TI may alter final pricing prior to accepting any order.
2 Free trial version of Code Composer Studio IDE available as part of the free evaluation tools found at www.ti.com/ccstudiofet
3 Required prior purchase of OEVMM

TMS320DM643x Digital Media Processors

TMS320DM643x digital media processors are based on the TMS320C64x™ DSP core. They are ideal for cost-sensitive digital media applications such as machine-vision systems, robotics, video security, video telephony and automotive vision applications such as lane departure and collision avoidance.

For Evaluation:

Description | Part Number | S.U. 1
--- | --- | ---
Blackhawk XDS506™ JTAG PC Emulator (optional) | TMDSM560PCI | 2,995
Blackhawk XDS560 JTAG USB Emulator (optional) | TMDSM560USB | 2,999

1 Prices are quoted in U.S. dollars and represent year 2008 suggested resale pricing. All prices are subject to change. Customers are advised to obtain the most current and complete pricing information from TI prior to placing orders. TI may verify final pricing prior to accepting any order.
2 Available in the 2010 (on-plastic BGA) and 207 (on-Pb-free BGA) packages. Also available with USB automotive reliability.
3 McBSP can be configured as an SPI peripheral.
4 An BSP can be configured as an SPI peripheral.

TMS320DM6437 Digital media processor block diagram

For more information, visit www.ti.com/dm643x

Development Tools for TMS320DM643x Processors

For Evaluation and Production:

Description | Part Number | S.U. 1
--- | --- | ---
TMS320DM6437 Digital Video Development Platform (DVDP) 2 | TMDSVPSPKB-4L | 495
Code Composer Studio™ IDE 3 | TMDSCCSALL-1 | 3,595
Blackhawk XDS506™ JTAG PC Emulator (optional) | TMDSM560PCI | 2,995
Blackhawk XDS560 JTAG USB Emulator (optional) | TMDSM560USB | 2,999

1 Prices are quoted in U.S. dollars and represent year 2008 suggested resale pricing. All prices are subject to change. Customers are advised to obtain the most current and complete pricing information from TI prior to placing orders. TI may verify final pricing prior to accepting any order.
2 Free trial version of Code Composer Studio IDE available as part of the free evaluation tools found at www.ti.com/ccstudiofet
3 Required for digital media software evaluation and/or production
TMS320DM647/TMS320DM648 Digital Media Processors

TMS320DM647/TMS320DM648 digital media processors are based on the TMS320C64x+™ DSP core and are optimized for multi-channel video security and infrastructure applications, including digital video recorders (DVRs), IP video servers, machine-vision systems and high-performance imaging applications.

<table>
<thead>
<tr>
<th>Device</th>
<th>CPU</th>
<th>Frequency (MHz)</th>
<th>L2 DRAM (Bytes)</th>
<th>L1 DRAM (Bytes)</th>
<th>ROM (Bytes)</th>
<th>External Memory (Bytes)</th>
<th>EDMA</th>
<th>Video Ports (Configurable)</th>
<th>Serial IF</th>
<th>Connectivity LF</th>
<th>Voltage (V)</th>
<th>Core</th>
<th>Packaging</th>
<th>Price</th>
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<tr>
<td>TMS320DM64723317</td>
<td>TMS320DM6472870</td>
<td>700</td>
<td>32/64 KB</td>
<td>256 KB</td>
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<td>TMS320DM64823317</td>
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<td>SPU</td>
<td>1.2</td>
<td>3.3</td>
<td>18 x 19 mm</td>
<td>128B</td>
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</table>

1 Prices are quoted in U.S. dollars and represent year 2008 suggested resale pricing. All prices are subject to change. Customers are advised to obtain the most current and complete pricing information from TI prior to placing orders. TI may verify final pricing prior to accepting any order.

TMS320DM648 Digital Media processor block diagram

For more information, visit www.ti.com/dm64x

Development Tools for the TMS320DM647/DM648 Processors

For Evaluation:

- Code Composer Studio™ Integrated Development Environment (IDE)*
- Blackhawk XD650™ JTAG PC Emulator (optional)
- Blackhawk XD650 JTAG USB Emulator (optional)
- XDS560 USB Trace Emulator*

Description | Part Number | $US |
--- | --- | ---
TMS320DM648 Digital Video Development Platform (DVDP)* | TMDX09P484 | 1,295 |
Code Composer Studio™ IDE* | TMDSCSDDL-1 | 3,595 |
Blackhawk XD560™ JTAG PC Emulator (optional) | TMDSEMU560PCI | 2,995 |
Blackhawk XD560 JTAG USB Emulator (optional) | TMDSEMU560 | 2,995 |
XDS560 USB Trace Emulator* | TMDX094 | 2,995 |

1 Prices are quoted in U.S. dollars and represent year 2008 suggested resale pricing. All prices are subject to change. Customers are advised to obtain the most current and complete pricing information from TI prior to placing orders. TI may verify final pricing prior to accepting any order.

2 Free trial version of Code Composer Studio IDE available as part of the free evaluation tools found at www.ti.com/eduvembre

Development Tools for the TMS320DM647 Processor

For Evaluation:

- Code Composer Studio™ Integrated Development Environment (IDE)*
- Blackhawk XD560™ JTAG PC Emulator (optional)
- Blackhawk XD560 JTAG USB Emulator (optional)
- XDS560 USB Trace Emulator*
- DVSPB MontaVista Pro Software and TI DVSDK, CCStudio IDE, + XDS560R Emulator

| Description | Part Number | $US |
|--- | --- | ---
TMS320DM647 Digital Video Evaluation Module (DVEM)* | TMDX09M647 | 1,995 |
Code Composer Studio™ Integrated Development Environment (IDE)* | TMDSCSDDL-1 | 3,595 |
Blackhawk XD560™ JTAG PC Emulator (optional) | TMDSEMU560PCI | 2,995 |
Blackhawk XD560 JTAG USB Emulator (optional) | TMDSEMU560 | 2,995 |

1 Prices are quoted in U.S. dollars and represent year 2008 suggested resale pricing. All prices are subject to change. Customers are advised to obtain the most current and complete pricing information from TI prior to placing orders. TI may verify final pricing prior to accepting any order.

TMS320DM647 Digital Media processor block diagram

For more information, visit www.ti.com/dm6467

Development Tools for TMS320DM6467 Processor

For Evaluation:

- Code Composer Studio™ Integrated Development Environment (IDE)*
- Blackhawk XD560™ JTAG PC Emulator (optional)
- Blackhawk XD560 JTAG USB Emulator (optional)
- DVSPB MontaVista Pro Software and TI DVSDK, CCStudio IDE, + XDS560R Emulator

| Description | Part Number | $US |
|--- | --- | ---
TMS320DM6467 Digital Video Evaluation Module (DVEM)* | TMDX09M6467 | 1,995 |
Code Composer Studio™ Integrated Development Environment (IDE)* | TMDSCSDDL-1 | 3,595 |
Blackhawk XD560™ JTAG PC Emulator (optional) | TMDSEMU560PCI | 2,995 |
Blackhawk XD560 JTAG USB Emulator (optional) | TMDSEMU560 | 2,995 |

1 Prices are quoted in U.S. dollars and represent year 2008 suggested resale pricing. All prices are subject to change. Customers are advised to obtain the most current and complete pricing information from TI prior to placing orders. TI may verify final pricing prior to accepting any order.

2 Free trial version of Code Composer Studio IDE available as part of the free evaluation tools found at www.ti.com/eduvembre

3 Requires prior purchase of ISVEM
TMS320DM3x Digital Media Processors

The DM335 processor is a low-cost, low-power processor providing advanced graphical user interface for display applications that do not require video compression and decompression. Coupled with a video processing subsystem (VPSS) that provides 720p display, the DM335 processor is powered by an ARM9 S core so developers can create feature-rich graphical user interfaces. Optimized for HD video, the TMS320DM355 digital media processor integrates a video/imaging co-processor to enable ultra-low power consumption. The DM355 processor comprises an integrated video processing subsystem, an MPEG-4/JPEG coprocessor (MJOP), an ARM926 processor and peripherals.

Prices are quoted in U.S. dollars and represent year 2008 suggested resale pricing. All prices are subject to change. Customers are advised to obtain the most current and complete pricing information from TI prior to placing orders. TI may verify final pricing prior to accepting any order.

For Production:
- TMS320DM355 DM355 Processor $11.90
- TMS320DM335 DM335 Processor $13.65
- TMS320DM315 DM315 Processor $10.50

For Evaluation:
- Blackhawk XDS560 JTAG PCI Emulator (optional) TMDSEMU560PCI 3,595
- Code Composer Studio IDE* TMDSCCSALL-1 3,595

1 Prices are quoted in U.S. dollars and represent year 2008 suggested resale pricing. All prices are subject to change. Customers are advised to obtain the most current and complete pricing information from TI prior to placing orders. TI may verify final pricing prior to accepting any order.

2 Free trial version of Code Composer Studio IDE available as part of the free evaluation tools found at www.ti.com/ccstudiofet.

For a complete list of Developer Network members supporting DaVinci technology, please visit the TI DaVinci Developer Network Catalog at www.ti.com/dvdsdevenetwork.

A Variety of Resources Keep You in the Know

DaVinci™ Technology Webcasts

View the archive of TI on-demand DaVinci webcasts to learn how to accelerate and simplify your video system design. Designed for 24/7 access, these webcasts typically last one hour. Visit www.ti.com/daviniwebcasts.

DaVinci Video Casts: Engineering in Front of the Camera

Whether you have two minutes or two hours, a variety of DaVinci technology videos are available for on-demand viewing. These four-minute videos provide engineers the technical meat on the TMS320DM355 and TMS320DM6467 DaVinci processor products, tools and software. Check out the line-up at www.ti.com/davincivideocasts.

DaVinci Technology Training

Get hands-on experience on DaVinci technology through one-day and multi-day workshops and online training. Check www.ti.com/davincitraining for the next workshop near you, as well as 24/7 online training and webcasts.

- Introduction to DaVinci Technology Online Training – www.ti.com/davinciolt
- DM6467 DaVinci Processor for HD Transcoding – www.ti.com/dm6467olt
- TMS320DM644x Multi-Day Workshop – www.ti.com/dm644xmdw
- TMS320DM6437 One-Day Workshop – www.ti.com/dm6437odw

TI’s DaVinci™ Developer Network Makes DaVinci Technology Easy to Implement

TI DaVinci Developer Network Network Support

Valued members of TI’s DaVinci Developer Network provide integral components and tools that complement DaVinci technology. Developer Network members offer various levels of video system integration, optimization and system expertise on DaVinci products worldwide.

For a complete list of Developer Network members supporting DaVinci technology, please visit the TI DaVinci Developer Network Catalog at www.ti.com/dvdsdevenetwork.

A Variety of Resources Keep You in the Know

Development Tools for the TMS320DM355 and TMS320DM355 Processors

**For Evaluation:**

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<th>Description</th>
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<tbody>
<tr>
<td>Code Composer Studio™ IDE*</td>
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**For Production:**

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<td>Digital Video Software Production Bundle (DVSPB)™ MasterCard Pro Software and TI DVSDK</td>
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<td>TMS320DM355 Digital Video Evaluation Module (DVEVM)*</td>
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* Prices are quoted in U.S. dollars and represent year 2008 suggested resale pricing. All prices are subject to change. Customers are advised to obtain the most current and complete pricing information from TI prior to placing orders. TI may verify final pricing prior to accepting any order.

* Free trial version of Code Composer Studio IDE available as part of the free evaluation tools found at www.ti.com/ccstudiofet.

* Requires prior purchase of DVEVM

* Required for digital media software evaluation and/or production.
DaVinci White Papers and Articles
View the wide variety of DaVinci white papers and articles to see the possibilities for designing and developing digital video and audio end equipment devices and applications using DaVinci technology. Visit www.ti.com/davinciwhitepaper.

DaVinci Technology FAQs
Have questions about DaVinci technology? Browse the DaVinci questions and answers to find out everything you need to know about DaVinci processors, development tools, applications, frameworks, training and support at www.ti.com/davincifaq.

Delve Into Digital Video with Video360 Podcasts
The Video360 podcasts feature industry news, technology updates and practical tips regarding the latest innovations in digital video. Check out the archive at www.ti.com/video360podcast.

CD Provides Comprehensive View of DaVinci Technology
This highly informative CD includes numerous white papers, FAQs, technical specifications, product bulletins, benchmarks, information about third-party support, podcasts, important Web links and more. Get your free copy now at www.ti.com/davincidc.

Compatible Analog Products for DaVinci Technology-Based Digital Video Applications
TI provides engineers with high-performance signal chain, interface, clocking and power-management solutions to complete digital video applications based on DaVinci technology, as well as a variety of high-performance analog and logic products that help maximize the performance and functionality of your application. www.ti.com/davincianalog

Video360 Blog Provides Valuable Perspectives
Check out the latest posts by TI's Gene Frantz, a recognized leader in DSP technology, and other TI industry leaders. Interesting, enlightening and opinionated, it will give you insight into trends at TI and throughout the industry. See what they’re saying at www.ti.com/davinciblog.

Additional Web Links and Community Resources
- linux.davinicdsp.com – Here engineers can find open source files related to DaVinci and join the DaVinci Linux Open Source mailing list for discussions.
- wiki.davinicdsp.com – The DaVinci Technology Developers Wiki was established to assist developers taking advantage of DaVinci processors to get started, help each other innovate and to foster the growth of general knowledge about the hardware and software surrounding these devices.
- www.ti.com/dspdesignsupport – DSP Design Support provides quick access to all technical documentation, tools and software details — all from one page.
- www.ti.com/quality – Find information regarding the quality, reliability and Lead (Pb)-Free compliance of TI semiconductor products.

DaVinci™ Technology Technical Documentation
To download any of the above documents, please visit www.ti.com/lit/xxxxxxm where xxxxxx is the web search literature number (only use lowercase characters).
DaVinci™ Technology Technical Documentation (Continued)

To download any of the above documents, please visit www.ti.com/davincicustomers to see the full list of customers.

Aethra
www.aethra.com

Maia XC from Aethra

Aethra leveraged TI’s DaVinci technology-based integrated solution to provide their compact, new generation video phones for personal IP and ISDN video conferencing, with better processing power and framework software. Using a single DaVinci digital media processor, Aethra was able to integrate a complete H.264-based IP videophone, providing full software programmability and codec flexibility and leveraging TI Code Composer Studio™ Integrated Development Environment (IDE), thereby reducing their time to market and achieving optimum system cost.

Amino Communications
www.aminocom.com

Amino found an answer to their high-performance and low-cost standard definition (SD) SoC needs with TI’s DaVinci technology. By choosing DaVinci technology, Amino was able to create a multi-codec IP STB supporting MPEG-2, MPEG-4p12, H.264 and Windows Media Video. The programmable DSP and high-speed USB interface allowed for the rapid addition of SIF/H.263 video telephony and an AVS codec to meet key regional requirements. The combination of TI hardware and Amino software has created a highly flexible IP STB that can be upgraded in the field to deliver additional revenue services.

Select Customer Products

Select Customer Products
Image Sensing Systems (ISS)  
www.imagesensing.com

Image Sensing Systems, Inc. has created a new generation of advanced, intelligent Autoscope products. The Autoscope Terra family of products, which includes the Autoscope Solo Terra and Autoscope RackVision Terra systems, targets Intelligent Transportation Systems markets that include intersection control, highway monitoring and tunnel safety. Autoscope Terra products instantly generate high-quality video output made possible by TI’s DaVinci processors and associated development tools.

Hikvision  
www.hikvision.com/en

Hikvision’s digital surveillance products feature TI’s DaVinci™ technology and Hikvision’s own patented H.264 video compression algorithm. Hikvision was established in 2001 and began cooperation with TI beginning in 2003 by releasing a PCI add-on card and DVR based on the TMS320DM642 digital media processor. In 2006, they released a digital video server, IP module and IP camera all based on DaVinci technology. Their decision to utilize DaVinci technology facilitated their ability to quickly complete designs for a variety of products from one technology. TI’s testing technology has allowed Hikvision to leverage its relationship and cooperation with Texas Instruments to guarantee the stability and quality of its products.

Hikvision DS-2CDXXX series IP cameras are designed especially for remote surveillance. DaVinci technology enabled the use of an embedded Linux OS, creating a more steady and reliable solution.

AVM  
www.avm.de/en

For AVM, DaVinci™ technology enabled the design of a high-performance IP STB SoC solution. This solution met all of their customer’s requirements for quick video on demand (VoD) navigation and enabled the use of high-efficient video codecs. Since its launch, AVM’s FRITZ!Box family has grown to not only network computers and ADSL lines, but also to enable Internet access over cable-free WLAN links while providing the advantages of Internet telephony over existing telephones.

The AVM FRITZ! Media 8020 streams digital content to users’ televisions from a wireless connection, and is compatible with Universal Plug & Play standards. This means that users can easily play local content from media servers and hard drives. FRITZ! Media also features integrated WM DRM 10 support for VoD.

AVM FRITZ! Media 8020

VisioWave IVP Digital Video Platform by GE Security

With a more than five-year relationship with TI, GE Security leveraged TI’s DaVinci technology to meet their hardware objective of a multi-generational platform for future codec enhancement. TI’s DaVinci technology provided the power to handle GE Security’s processing needs for compression and still leave room for expansion and extension. GE Security cites DaVinci technology’s support of Ethernet and USB interfaces and TI’s familiarity with GE Security’s working environment as further examples of why TI was integral to their design.

VisioWave IVP Digital Video Platform by GE Security

GE Security  
www.gesecurity.com

Hikvision DS-2CDXXX

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Hikvision DS-2CDXXX series IP cameras are designed especially for remote surveillance. DaVinci technology enabled the use of an embedded Linux OS, creating a more steady and reliable solution.
Keda Communications Ltd., a video communication solutions provider based in China, delivers the TrueSens video conferencing system for small- to medium-sized enterprises. Based on DaVinci™ digital media processor and software technology, the TrueSens video conferencing system aims to provide enterprises with secure, low-cost and easy-to-use video communication solutions by solving issues in enterprise video system deployment and applications. DaVinci technology enabled KEDACOM’s full software programmability and feature enhancement and upgrade abilities via software. Leveraging TI digital media codec software technology, KEDACOM was also able to achieve D1(SD) resolution video conferencing.

Lumenera Corporation enables analysis at the camera head, relieving the network of loading real-time video to backroom servers. For a fraction of the cost of a dedicated server, TI’s DaVinci™ technology allows the camera itself to run the full suite of analytics from ObjectVideo OnBoard. The Li045, Lumenera’s initial intelligent camera utilizing TI’s DaVinci technology, is the first to make use of an ultra-wide dynamic range (120+ dB) sensor, which overcomes the issue of washed-out images in challenging lighting environments. This enables quality images in all situations to ensure that critical video is captured.

Konka, one of the world’s largest consumer electronics enterprises, offers the IPB5310 STB. The IPB5310 is ideal for home video and audio entertainment and delivers a low-cost solution offering easy implementation, boosting the adoption of IPTV services in China and worldwide. The programmable processors at the foundation of TI’s DaVinci technology enabled Konka to develop an IP STB product, which is cost effective and easy to upgrade—both vital characteristics in this growing market. The IPB5310 can be applied for IPTV services, live TV, video on demand (VoD), time-shifted TV, Web browsing service, SMS and MMS informing services, information broadcast service and local and online gaming service. It can also be used as a portable audio player or electronic album, supporting MP3 audio playback and photo display through a USB interface. The IP STB supports multiple codecs including MPEG-2, MPEG-4, WMV9/VC-1, AVS and H.264.

NexVision, a manufacturer of IP network video security solutions, offers the Nexdome Dragonfly IP video security camera. Leveraging the DaVinci TMS320DM644x processor, the Nexdome Dragonfly creates a versatile plug-and-play video security solution that can be tailored to meet specific customer demands, benefiting from the implementation of open industry standards such as Linux, MPEG-4 and real-time streaming network protocols to offer seamless integration of the camera into global surveillance systems. The Dragonfly provides an open camera platform that is highly suited to large area surveillance applications such as public transportation, utility plants and medical centers.
Red Embedded Design, a provider of embedded video technology for videophone, IPTV and mobile devices, selected Texas Instruments’ DaVinci™ digital media processors for their product range, including the VPHS400, VPHS300 and VPTV200.

Red Core technology running on TI DaVinci processors enables a range of broadband appliances with exceptional videophone quality, video streaming, browsing and a host of other applications for screens from seven inches to large-screen televisions. By utilizing DaVinci technology, Red Embedded is able to spin multiple variants of their products (IP STB- and desktop-type) while leveraging the same core technology.

Since 2003, Yuxing has been successfully cooperating with PCCW-HK for years, as its IP STB provider. The “NOW” broadband services from PCCW through ADSL network provide subscribers with colorful TV frequency choices. After years of development, Yuxing provides IP STBs worldwide. The YX-5821A is the latest Yuxing-developed broadband IP STB based on TI DaVinci technology. Yuxing’s decision to leverage DaVinci technology allowed them to provide a simple and compact shape and to support the decoding and playing of such code streams as H.264 and MPEG-2. Additionally, this also enabled Yuxing to take advantage of software that is easily expanded and can be used by a variety of users to provide many value-added services such as video-on-demand, TV and broadcasting, and network games.

Red Embedded
www.redembedded.com

Yuxing
www.yuxingsoft.com

YX-5821A STB by Yuxing

The platform bar, C64x+, Code Composer Studio, DaVinci, DSP/BIOS, eXpressDSP, OMAP, TMS320C2000, TMS320C5000, TMS320C6000, TMS320C64x+, XLYNQ and XDS560 are trademarks of Texas Instruments. All other trademarks are the property of their respective owners.

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