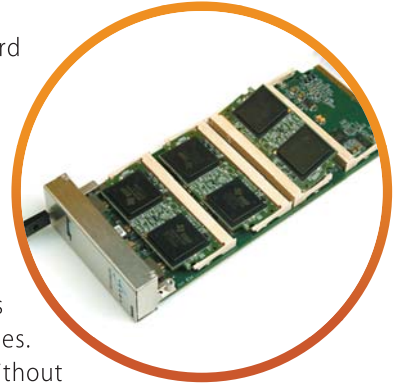


SURFRider/AMC

The SURFRider/AMC is a fully-integrated RoHS-compliant AMC DSP resource board providing flexible yet heavy-duty multimedia processing capabilities. Featuring SURF's revolutionary patent-pending modular design and Open Framework approach, which allows seamless integration of user-defined and proprietary algorithms, the SURFRider/AMC meets IMS requirements and is the ideal choice for development of a wide range of carrier-grade telecom applications. It is field-proven, having already been implemented by a number of Tier-1 TEMs.

The SURFRider/AMC features the SURFDocker™, a modular plug-in that is designed to carry pairs of DSPs, including the latest and future members of Texas Instruments' C64x series. This paradigm allows population of different types of DSPs on each AMC carrier without modifying the application. Up to four SURFDocker modules can be plugged into a single SURFRider/AMC, for a total of eight DSPs per AMC board for maximum flexibility.

The SURFRider/AMC supports the standards-based PICMG® SFP I-TDM protocol over Gigabit Ethernet for transporting audio, video, fax and modem traffic. This makes the SURFRider/AMC the perfect solution for ATCA and MicroTCA platforms in various types of systems.



Innovative, Modular Design

The SURFRider/AMC has been designed to support application development from prototype through production: the same board can be used for all stages of the development cycle.

With this innovative, modular approach, hardware design decisions can be made in parallel to application development, such as:

- the interfaces to be used in the final AMC solution
- the specific type of DSPs to be used in the final system
- the number of DSPs per board needed to achieve the required channel density
- the types of DSPs to be integrated on the same board simultaneously

The SURFRider/AMC is a fully integrated mezzanine card that has been designed as per the PICMG AMC standards. It has been pre-integrated with a number of leading carrier manufacturers' products and can be mounted on various platforms, as follows:

- ATCA
- MicroTCA

Complete Media Processing Package

Texas Instruments' C64x series of DSP devices are specifically designed to handle converged applications that require a high-performance fixed-point processing architecture with significant memory and multiple high-speed I/O paths, such as audio, video, and wireless applications.

In addition to telephony applications, the SURFRider/AMC DSP resource board can serve as a flexible, high-capacity, programmable platform for processing intense applications such as video processing, VoIP, cryptography, and medical imaging.

TARGET APPLICATIONS

SURFAce-112/PCI is ideal for the following communication platforms and multimedia applications:

- Media Server (MRF)
- Media Gateway
- Session Border Controller (SBC)
- 3G to IP Video Gateway
- IVR/IVVR
- iPBX
- IWF
- Voice/Video Conferencing
- Mobile Value Added Services (VAS)
 - Mobile TV
 - Mobile VOD
 - Video calling
 - Ringback tones

THE SURF SOLUTION >

The SURF solution supports multimedia applications based on an open, standards-based architecture. SURF's media processing software – SURFWare™ - provides the most comprehensive set of media processing capabilities available in the market. SURFWare™ also enables, through its open framework, capabilities proprietary applications to be embedded directly into the DSP framework. Multiple drivers and a variety of interfaces facilitate integration while built-in diagnostics provide easier troubleshooting and better application control.

SPECIFICATIONS >

FORM FACTOR	AMC Up to 8 DSPs using 1-4 SURFDocker plug-in modules with 2 DSPs on each module (flexible support for 2, 4, 6 or 8 DSPs)
INTERFACES	Configurable interfaces to each DSP based on DSP type, including: <ul style="list-style-type: none"> • Rapid I/O • Gbit Ethernet • I-TDM
SIZE	<ul style="list-style-type: none"> • Compliant with the AMC.0 single width mid/full size form factor • Assembled on ATCA carriers or on a MicroTCA chassis.
POWER	Up to 47W per fully-populated TCl6486 board @ 500MHz
JTAG	<ul style="list-style-type: none"> • DSP JTAG connector for DSP emulation • FPGA JTAG connector for FPGA booting and programming • Boundary-Scan JTAG
REGULATORY COMPLIANCE	EMC US: FCC part 15 Class A with shielded telecom cables and STP Ethernet cables Canada: IECs-003 with shielded telecom cables and STP Ethernet cables EU: EN55024:1998 A1: 2001/A2:2003; EM55022:1998 A1:2000/A2:2003 Class B with shielded telecom cables and STP Ethernet cables Safety US: UL Std No 60950-1 Canada: CAN/CSA-22.2 Number 60950-1-03 EN: 60950-1: 2001 Environmental IEC 60068-2-1/2 High & Low Temperature IEC 60068-2-14 Temperature cycle IEC 60068-2-30 Humidity 90-100%, +25+55C IEC 60068-2-64 Random vibration IEC 60068-2-27 Shock IEC 60068-2-32 Free fall
OPERATING REQUIREMENTS	Operating Conditions Temperature: -5°C - 40°C (41°F - 104°F) Humidity: 10% to 80% (non-condensing) Storage -25°C - 85°C (-13°F - 185°F)

SOFTWARE SPECIFICATIONS - See SURFWARE Brochure

ABOUT SURF COMMUNICATION SOLUTIONS >

SURF Communication Solutions (SURF) is an industry leader in high-capacity processing solutions for real-time multimedia communication systems and applications. Since 1996, SURF's products have delivered the integral technology behind many of the leading vendor's multimedia servers and gateways deployed to operators and service providers worldwide. SURF-powered multimedia applications are delivering value added services to millions of end-users every day. Today, SURF is ideally positioned to stimulate change in the way we communicate. The video-ready SURF solution supports multimedia processing including full video, voice and data IP to IP communications, as well as modem and fax over IP. It is a fully converged multimedia processing subsystem that integrates easily into media gateways and servers. Since there is no such thing as "one size fits all," the SURF offering is available as a solution platform or in various form factors or DSP chips affording unmatched density and optimal performance.