TB-Video™ Superior 3G-324M *on a blade*™

TelcoBridges' innovative TB-Video *System-Blade*™, a high-performance building block for mobile video gateways is in a class of its own. It enables telecom system integrators to compete effectively, and globally, by developing tailor-made mobile video solutions extremely costeffectively.

High-Value Applications

- Video clip streaming
- Mobile TV
- Video call centers
- Mobile to IP connectivity
- Video ringback tones
- Video surveillance
- · Mobile video sharing
- Videomail

TelcoBridges' proven System-Blade™ solution handles the 3G-324M call set-up negotiation on its own, including H.223 mobile level negotiation and synchronization; H.245 master-slave negotiation; capability exchange and all other procedures required by the standard.

Fully Featured Blade

- 120 full/half-duplex channels
- Automatic H.223 & H.245 negotiations
- 3G-324M to IP interworking
- Simple high-level API
- Integrated with 2,000+ channel simultaneous play/record TB-StreamServerTM

Scalability

TelcoBridges' *System-Blade*[™] architecture enables unrestricted system growth potential. With 120 simultaneous full or half-duplex 3G-324M channels per TB-Video *System-Blade*[™], plus over 2000 simultaneous video streaming channels per TB-*StreamServer*[™], and the option of using as many TB-*StreamServer*[™] and TB-Video [™] blades as you need, the sky's the limit in terms of system scalability.

Reliability

TelcoBridges enabled systems are highly-available and carrier-class, with no single point of failure. All components of the system support N+1 redundancy: TB *System-Blades™*, TB-*StreamServer™* and the application server. Plus with our easy to implement SS7 HA functionality, you can guarantee no loss of service and no loss of calls.

Efficiency

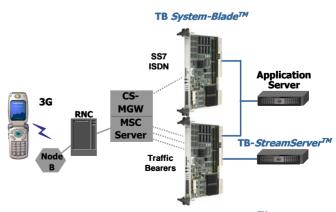
Due to complex 3G-324M standards, application development has been costly. However, using our field-proven TB-Video *System-Blade™* to construct your 3G video system saves you time and money. The high-level API simplifies 3G video play and record with a single API call: **TelcoB**ridges automatically handles H.223 and H.245 procedures and initiates the play/record process on the TB-*StreamServer*TM.

Flexibility

3G-324M on a Blade , plus our signaling on a Blade , with multiple SS7 and ISDN variants, as well as SIP signaling, offers superior interoperability and the ability to connect to any network.

Quality

TelcoBridges has developed a pure and thorough implementation of the 3G-324M standard which is field-proven to be highly reliable and interoperable. With **TelcoB**ridges' proven technology you are working with an innovative system architecture on which to build 3G video solutions that guarantee a high quality user experience.



TB-Video System-Blade™

TB-Video System-Blade[™]

Standards

- 3GPP 3G-324M
- ITU-T H.223 Annex A (mobile level 1)
- ITU-T H.223 Annex B (mobile level 2)
- ITU-T H.245 version 7, and selected features up to version 11 Capacity
- 120 full or half-duplex 3G-324M channels per blade
- Anv combination of E1/T1/J1s

Automatic H.223 Functionality

- · Mobile level selection and synchronization
- · Adaptation layer management

Automatic H.245 Functionality

- WNSRP support for fast call setup
- · SRP, NSRP, CCSRL, WNSRP mode selection
- Capability exchange (AMR/G.723.1 audio, H.263/H.264/MPEG-4 video)
- Master-slave determination, logical channel control, MTE exchange

Additional Capabilities

- · Video drop-out when connecting to non-video terminals
- 3G-324M to SIP interworking

TB-StreamServer™

- · Audio and video streaming application included
- Over 2,000 simultaneous play and/or record streams per server
- · File format: .3gp
- Available storage: over 10,000 hours per hard drive
- · Double access: simultaneously records and plays the same file
- OS support: Intel/SPARC Solaris™, Linux, Windows®

Signaling System-Blade™

VoIP Signaling

- SIP (RFC 3261)
- **TDM Signaling**
- SS7 HA MTP2 and MTP3, ISUP, SCCP, TCAP SS7 Performance
- Over 1,000 ISUP calls per second (~ 3.6M BHCC)
- Up to 64 SS7 links per blade
- Up to 30,000 CICs per blade

Additional Capabilities

 Live signaling configuration – any protocol, any trunk, any blade, anytime

System Scalability

- 120 x 3G-324M channels TB-Video $System\text{-}Blade^{TM}$
- 4 to 64 T1/E1/J1s per signaling blade (field upgradeable)
- Unrestricted number of blades per system
- Unrestricted number of audio/video streaming channels per system

High-Availability and Redundancy

- Ready-to-use SS7 HA sample application source code
- N+1 É1/T1/J1 facility protection (using TB-N+1 ShelfTM)
- N+1 System-Blade[™] protection
- N+1 TB-StreamServer™ protection
- Application server redundancy (active-active or active-standby)
- · Dual redundant GigE control paths
- · Dual redundant GigE paths for RTP video streaming

Application Development Environment

- Simple high-level 3G-324M message-based API
- Asynchronous message-based API
- OŚ support: Intel/SPARC Solaris™, Linux, Windows®
- Sample source code provided for most functions, including:
 - o SS7 HA
 - o 3G-324M play/record
 - SS7 to 3G-324M to SIP call bridging
- Standalone blade (does not require chassis CPU server blade)

Mechanical

- CompactPCI 6U single-slot blade (PICMG 2.0, rev. 3.0)
- Packet switching backplane (PICMG 2.16, rev. 1.0)
- ECTF H.110 (PICMG 2.5, rev. 2.0), 4096 fully switchable timeslots

Electrical

- · Less than 60 Watts nominal
- Maximum current: 13,5 A @ 3,3 VDC; 3,3 A @ 5 VDC; <0,1 A @ -12 VDC

Environmental

- Operating: 0 to +50° C, 0 to 95% non-condensing, relative humidity
- Storage: -20 to +75° C, 0 to 95% non-condensing, relative humidity

Compliance

- Designed to meet NEBS Level 3
- EMC
 - o Part 15 (2004), subpart b
 - o EN55022(1998)
 - o EN61000
 - o ENV50204(1995)
- Safety
 - o CE
 - o UL60950-1:2003, first edition
 - o CSA C22.2 No.60950-1-03 first edition April 1, 2003HA

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TelcoBridges is clearly defining the future of enabling communications technologies. By supplying the industry's best telecom platform, TelcoBridges is helping system integrators worldwide realize their bright ideas. Since 2002, TelcoBridges' customers create carrier-grade telecom solutions used by the world's largest operators in more than 30 countries.

Finalist "2006 Canada Innovation Award": Development of Export Sales

