

GX SS7-SIP Solution

GX Series SS7-Enabled Gateway and Media Gateway Controller (MGC)

Key Features & Benefits

- Intelligent and flexible call routing maximizes business opportunities and network efficiency
- Unmatched SS7 capabilities, including full SS7 backhauling via SIGTRAN and support for over 60 SS7 country variants, enable large-scale global deployments
- Vendor neutrality facilitates easy integration within multi-vendor network solutions
- Multi-protocol interworking, supporting SIP/SIP-T/Q.1912.5, Megaco/H.248, SS7/ISUP, and SIGTRAN, allows for quick and easy deployment
- Carrier-grade reliability based on NEBS level 3-certified hardware and full component redundancy ensures 99.999% availability
- Enhanced scalability enables cost-effective incremental growth of ports, call capacity and services

Operators of wholesale and retail long-distance networks are migrating their legacy trunking networks to VoIP-based next-generation networks (NGNs) to reduce operating costs and enhance service flexibility. At the same time, VoIP service providers are looking for a cost-effective solution to connect their networks to the PSTN.

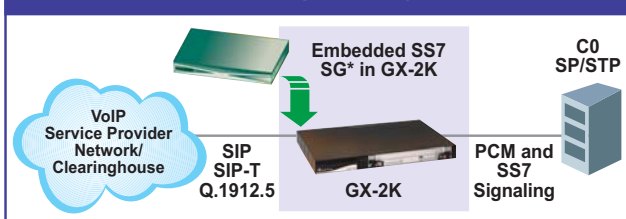
The GX SS7 Series are robust and standards-based media (trunking) gateways with embedded SS7 (M3UA) connectivity, controlled by the MGC using Megaco/H.248 control protocol.

The GX Media Gateway Controller is a scalable, carrier-grade SIP-based MGC that offers high-quality voice services, carrier-grade reliability and maximum service flexibility. With its open interfaces to non-proprietary media devices and application servers, the MGC facilitates the creation of best-of-breed network solutions.

The GX series is configured as a distributed "Class 4" solution using separate media gateways for SS7 signaling and PCM trunking and a separate MGC.

The Nuera GX SS7-SIP solution enables smooth migration to NGNs, while maintaining seamless connectivity to PSTN/SS7 services. In addition to controlling media gateways, the MGC provides intelligent call control, an advanced routing engine, and PSTN SS7 signaling support, providing control and interworking functionality.

Complete SS7-SIP gateway solution



IMS-TISPAN Ready: MGCF, BGCF, SGF, T-MGF.



* Contact Nuera for Details

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Specifications

Protocols	
SIP	SIP Redirect, RFC 3261 Session Initiation Protocol, RFC 2327 Session Description Protocol (SDP)
Megaco/H.248	IETF RFC 3525 (base protocol), ITU-T H.248.1 (base protocol), H.248.2 (fax packages), H.248.8 (error code and service change reasons)
Other Related Protocols	T.38 fax relay DTMF RFC 2833, in-band and out-of-band
Carrier Grade Features	
High Availability	99.999% availability No downtime and no call loss No single point of failure
Redundancy Scheme	1+1 high availability
Regulatory	NEBS compliant
PSTN Interfaces and Port Capacity	
GX-2K	E1/T1/J1 (480 ports)
GX-3K	OC-3/STM-1/T3 (over 2000 ports)
GX-8K	OC-3/STM-1/T3 (over 16,000 ports)
Routing	
Policies	Source-based, time-based, random, weight-based, locality, prefix-based, codec negotiation
Number Analysis	Calling party and called party number analysis and called party number analysis
Call Control Functionality	
Channel Selection Order	Ascending, descending, random, odd/even, longest idle, cyclic (up/down), and others
Resource Availability	Support for resource availability and routing calls to available resources
Number Manipulation	Modify calling party number Modify called party number Modify number to carriers' dialing/routing plan
Number Screening	CLIP/CLIR support
Session Admission Control	Admission control based on origination and available resources
Signaling	
End-to-End SS7	Sigtran support for signaling allowing for transport of ISUP parameters end to end via SIP SIP T/I
Glare Resolution	Support for glare resolution methods; support for dual seizure resolution procedures Q.764
SS7 Flavors	Support for over 60 SS7 national variants
Accounting	
CDRs	RADIUS interface support Successful and unsuccessful calls
Hardware Components	
MGC Server	IBM BladeCenter T IBM x3550
SS7 Signaling Gateway	Nuera GX Signaling Gateway platform
Management	
Configuration and Management	Advanced web-based management; XML; SNMP traps Version 3
Scalability	Distributed MGC platform provides unlimited scalability through adding blades to the IBM BladeCenter T

About Nuera Communications

Nuera Communications, designs, manufactures & sells packet voice gateways to communication service providers worldwide. These products work over any medium (cable, wireless, copper and fiber). Nuera's ORCA (Open Reliable Communications Architecture) product portfolio of VoIP gateways, softswitches, and management systems provide telephony solutions for cable and DSL networks, international long distance networks and enterprise networks. Nuera is a leader in the broadband telephony market.

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