

Bulletin No.: 136_OS7200

October 3, 2005

OfficeServ 7200 Converged System Product Release

Samsung Telecommunications America is pleased to announce the general availability of the OfficeServ 7200 converged communications platform.

The Samsung OfficeServ[™] 7200 converged system offers a complete solution for voice, data, wireline, and wireless for the small-to-medium enterprise. Although the system functions as a square key system, PBX, or hybrid, it offers much more. The OfficeServ 7200 is a "total office in a box" solution providing data router and switching functions (LAN/WAN), TDM voice processing, Voice over IP integration (VoIP), wireless mobility communications, integrated Voicemail, Computer Telephony Integration (CTI) applications, and much more, all in one powerful platform.

The OfficeServ 7200 can be rack-mounted in a standard 19" rack, wall mounted, or set on a desktop. Its compact cabinet design (occupying only 5 rack units), RJ-45 connectors, and standard Category 5 cabling provided an easy integration into any data center environment along with all of your other data equipment.

The all new integrated data modules add powerful LAN/WAN access capabilities providing a complete data network solution for your enterprise. Firewall and Intrusion Detection capabilities provide data security for your site. Virtual Private Network (VPN) and managed switch features such as Virtual LAN (VLAN) and (Quality of Service) (QoS) separate this product from traditional Key Systems. The OfficeServ 7200 includes all of these capabilities, plus the robust voice features that are offered on Samsung's iDCS 500 IP-Enabled and iDCS 100 IP-Enabled product lines.

OfficeServ 7200 Benefits:

- End-to-End Samsung components, Samsung Support and Samsung Training. The Ultimate in One-Stop Shopping!
- Data modules use a Data Server Management Interface (DSMI) to integrate with the OfficeServ 7200's VoIP components, such as IP Phones, Media Gateway Interface (MGI) and Main Control Processor (MCP) cards. This integration allows the system to automatically configure itself to accommodate the VoIP applications, such as IP Phones and IP networking, thus eliminating all the problems associated with incorrect network configurations, firewall issues, and incompatibilities found in 3rd party routers and switches.

- Ideal voice and data solution for greenfield deployments in new construction.
- OfficeServ 7200 integrates easily into an existing office data network providing many solutions, such as isolating voice traffic onto the separate data network provided by the OfficeServ 7200.
- The OfficeServ 7200 system networks (via QSIG over IP or QSIG over PRI) with other OfficeServ 7200 systems or any iDCS 100 or iDCS 500 system (software version 2.x or higher)



HARDWARE

KEYSETS

The OfficeServ 7200 supports all the same key sets and analog phones supported by the iDCS product line.

CABINETS

The OfficeServ 7200 is a single cabinet system easily expanding to a two cabinet system by adding an expansion cabinet. Both cabinets are identical. Each cabinet has a dedicated slot for the MCP or LCP and 5 universal slots. Therefore, a 2-cabinet system offers a total of 10 universal slots. Each cabinet occupies about 5 rack units when mounted in a 19" rack.

MAIN CONTROL PROCESSOR (MCP)

The MCP is the primary processor controlling system operation. The MCP uses a 32 bit Motorola MPC855T processor operating at a clock speed of 50 MHz. The MCP is always located in slot 0 of the main cabinet. The MCP has a smart media card slot which can accommodate a 32 MB SmartMedia card containing the system software.

MCP DAUGHTER BOARDS

There are only 3 types of daughter boards available in the system. They can only be mounted on the MCP. Only one of each type can be installed on the MCP in the dedicated position.

- 1) **OS MIS daughter board:** The MIS consists of the following: Two (2) external music/audio inputs, One (1) external paging audio output, One (1) loud bell audio output, One (1) common bell relay contact closure, Two (2) software programmable relay contact closures.
- 2) **RCM-2** (same as iDCS 500 RCM2): consists of 14 CID receivers and 16 CID senders. This board provides Caller ID for calls coming in on loop start trunks. This board will also deliver Caller ID to Single line phones on the system.
- 3) MFM (same as iDCS 500): Provides 12 additional DSPs for DTMF and tone detection.

LOCAL CONTROL PROCESSOR (OS LCP)

The LCP is a secondary processor that is required when the expansion cabinet is added. It is always located in slot 0 of the expansion cabinet. No daughter boards can be mounted on the LCP Card.

TRUNK CARDS

There are 2 types of trunk cards available for the OfficeServ 7200:

- 1) **OS TE/PRI:** This card is used as a CO trunk (provides 24 channels) or for QSIG over PRI networking. This card has the same features as the iDCS 500 TEPRI card for T1 and PRI circuits. A <u>maximum of 4 TEPRI cards can be installed per system</u>. They can only be installed in slots 3, 4 and 5 of the main cabinet or slot 3 of the expansion cabinet.
- 2) **OS 8TRK:** This is a standard 8 port Loop Start trunk card with Caller ID. This card can be installed in any universal slot.

STATION CARDS:

There are 5 different station cards available with the OfficeServ 7200:

- 1) **OS 8DLI:** 8 port DLI card for connecting digital key sets. This card can be installed in any universal slot.
- 2) **OS 16DLI2:** 16 port DLI card for connecting digital key sets. This card can be installed in any universal slot.
- 3) **OS 16MWSLI:** 16 port analog station card for connecting Single Line Telephones with or without Message Waiting Lamps. This card can be installed in any universal slot. The first port provides Power Failure Transfer (PFT) function.
- 4) **OS 8SLI:** 8 port analog station card for connecting Single Line Telephones. This card can be installed in any universal slot. The first port provides Power Failure Transfer (PFT) function.
- 5) **OS 8COMBO:** A combination card that has 8 dedicated ports for connecting Digital Key Sets and 8 dedicated ports for connecting Single Line Telephones.

OS 4WLI: Wireless Interface Card

The 4WLI card allows wireless handsets to be registered to the system. Each 4WLI supports up to 4 Wireless Access Points. A maximum of three 4WLI cards can be installed in a system. These cards can go in any universal slot. See Samsung *Product Bulletin No.:* 135_OfficeServ_Wireless for details.

SVMi-20E Voice Processing Platform

The SVMi-20E operates as an Auto Attendant system, a Voicemail System, or both. Equipped with 4 voice processing ports standard, the SVMi-20E can handle 4 calls simultaneously. The SVMi-20E is easily upgraded to 8 and/or 12 Ports by adding one or two 4-port VPM-E or the VPMF-E (same as SVMi-8E/16E). This card supports all features and functionality as the SVMi-8E/16E, including the E-mail Gateway application. Only one SVMi-20E can be installed per system. It can be installed in any universal slot. The message storage capacity on the SVMi-20E is approximately 7 hours with the 128MB Compact Flash configuration or approximately 140 hours with the Hard Drive configuration.

The OfficeServ 7200 no longer requires a separate AA card. The SVMi-20E can provide the first & second UCD announcements, MOH/BGM source, and Wake-Up announcements for Hotel/Motel applications.

Media Gateway Interface (OS MGI)

The MGI card supports up to 16 VoIP channels. **THERE ARE NO CHANNELS EMBEDDED ON THE CARD**. Up to four (4) MGI-D daughter boards can be added to the MGI board. Each MGI-D daughter board provides 4 voice channels each.

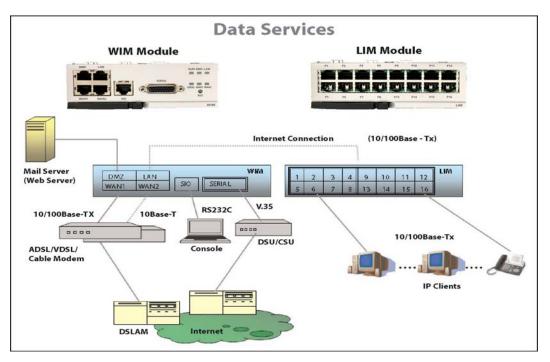
The MGI3 supports the following features:

- IP Phones
- IP Networking (Network multiple systems over an IP Network)
- G.729 (8K) CODEC, G.723.1, G.711, G.729A CODECs
- IP Trunking (SIP/H.323)
- T.38 Fax CODEC
- In-Band or Out-of-Band signaling of DTMF tones

The MGI can be installed in any universal slot up to a maximum of 10 per system.

DATA MODULES

The OfficeServ 7200 supports numerous data services via the 3 data modules described on the following page.



1) WAN INTERFACE MODULE (OS WIM)

The WIM is a data router module that transmits/receives data to and from Wide Area Networks (WAN) and the Internet. It provides 3 WAN interfaces for connecting to external networks plus a DeMilitarized Zone (DMZ) port. One WIM module can be installed per system. The WIM must be installed in slot 1 of either cabinet.

The WIM performs the following:

- Routing Functions: Static Routing, Dynamic Routing (RIP, OSPF), Inter-VLAN Routing, Multicast IGMP
- Network Functions: NAT/NAPT, Firewall, IDS, VPN, QoS

2) LAN INTERFACE MODULE (OS LIM)

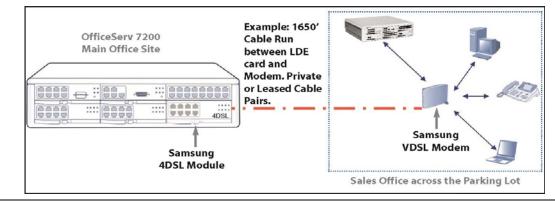
The LIM is a data switch module offering 16 10/100 Base-T, auto sensing, full-duplex LAN ports. The LIM connects to the WIM via system backplane. The LIM is the ideal device for providing a private LAN for PCs, servers, local IP phones, MCP, MGI or any IP device. The LIM can be managed or unmanaged. For the LIM to be managed (by the WIM) it must be installed in slot 2 with a WIM in slot 1. A managed LIM offers features like VLAN (802.1Q), IGMP Snooping and Layer 2 QoS. The LIM can be installed in slots 2 through 5 of either cabinet (maximum 8 per system), however there can only be one "managed" LIM per system.

3) OS 4DSL MODULE: LONG DISTANCE ETHERNET

The 4DSL module uses VDSL technology to extend the range of Ethernet data transmission distances. This module provides 4 ports that connect to a standard telephone twisted pair wire (tip and ring) on each port. The LAN port connects to the local data network.

The phone wire pair can be extended to 1 Km. Data from the LAN is transmitted over the standard telephone twisted pair wire which terminates into a Samsung VDSL modem (ordered separately). This module installs in any universal slot (max 10 per system).

- Transmission distance: 1 Km
- 0~300 m:Downstream 30 Mbps, Upstream 10 Mbps
- 300m~1 Km:Downstream 20 Mbps, Upstream 3 Mbps.



OFFICESERV 7200 SOFTWARE

The OfficeServ 7200 software for the MCP card is v2.48 (05.09.13). The LCP card software is v2.48 (05.08.17). The TEPRI card software is v1.07 (04.11.27). These 3 programs are included on the 32MB SmartMedia card.

The MGI card software is v1.06 (05.03.28).

OFFICESERV CTI APPLICATIONS

The OfficeServ 7200 supports the following OfficeServ applications:

- OfficeServ Link , OfficeServ EasySet,
- OfficeServ Operator
- OfficeServ Call and the new OfficeServ DataView application.

Refer to the Samsung *Product Bulletin No. 132_OfficeServ_DataView* for more details. OfficeServ Open TSP is available by special request.

VOICE OVER INTERNET PROTOCOL (VOIP)

The OfficeServ 7200 supports all of the same VoIP features that were supported on the Release 2 iDCS product line which includes local and remote IP phones, OfficeServ Softphone, IP networking, and IP trunking. The OfficeServ 7200 can network to other OfficeServ 7200 systems or other iDCS 500 Release 2 and iDCS 100 Release 2 systems (software release 2.48 or higher). If the WIM module is used, VoIP application deployment can be simplified by using the DSMI service. This service automatically configures the system data network allowing easy implementation of VoIP applications such as IP networking, IP phone deployments or even remote OSM connections.

HOTEL / MOTEL FEATURES

The OfficeServ 7200 Hotel / Motel application combines the OfficeServ 7200 business features with hospitality features providing a fully converged communications solution for the hotels/motel industry. Refer to the Samsung *Product Bulletin No.: 134_iDHS* for more details.

OFFICESERV 7200 SYSTEM CAPACITIES

DEVICE TYPE	MAXIMUM	NOTES
Physical Ports	192	In a 2 cabinet system
Stations Digital Analog IP	160* 160* 120	*Maximum number of stations without any trunks. Limited by the number of available universal slots and power supply units.
Trunks Analog - Loop Start Digital - T1/PRI	144* 80 80 96 96/92	*Maximum number of trunks without any stations. Limited by the number of available universal slots. Maximum 4 per system.
Networking Nodes Using QSIG over PRI Using QSIG over IP	5 15	Uses available T1/PRI card slots. Limited by IP Address Table, MMC 820.
Media Gateway Ports	160	Required to connect an IP phone to a TDM device including paging and background music and ports used for net- working or trunking.
Conferencing Circuits 5 Party Add-On Unsupervised Barge-In Call Record AME	6 6 6 6	Six Conference Circuits to be shared by all of these features.
Common Resources DTMF Receivers DTMF Senders Analog Caller ID Senders/Receivers External Music On Hold (MOH)	16 32 14 2	4 on MCP plus 12 on optional MFM board All on MCP Optional RCM2 daughter board Requires CPE and optional MIS
Paging Audio Output Internal Zones External Zones	1 5 2	1 on MIS daughter card. (99 members each zone) Requires customer provided equipment.
Voice Mail / Auto Attendant Ports SVMi-20E	12	System can have only one SVMi-20E card installed. Any port can be shared as AA/VM or dedicated to AA or VM.

NOTE: Installing various combinations of interface cards will reduce the maximum capacities listed above.

OFFICESERV MANAGER

OfficeServ Manager allows onsite or remote programming of the OfficeServ 7200 through the MCP LAN connection. Serial port programming is not available on the OfficeServ 7200. A new OfficeServ Manager module is available for programming the OfficeServ 7200. This module is installed automatically when installing the new OSM Launch Pad v1.03 (2005.09.21) or can be added to an existing OSM Launch Pad by simply downloading the OfficeServ 7200 OSM module. The OfficeServ 7200 OSM module is version 2.48 (05.08.31). The updated OSM Module is available at http://ebiz.samsungusa.com, under Technical Support, then click on Download Software.

The OSM application on CD-ROM (L-CD-OSM) is available for ordering using normal Samsung ordering procedures.

LITERATURE AND DOCUMENTATION

OfficeServ 7200 Brochure

A OfficeServ 7200 brochure is available for ordering using normal Samsung ordering procedures (L-SB-OS7200). A PDF of the brochure is available on the eCommerce web site (<u>http://ebiz.samsungusa.com</u>) under the Sales & Marketing Support/Download Documents area.

Documentation & Technical Manual

The OfficeServ 7200 General Description, System Administration Guide, Data Server User Manual, User Guides, Installation Guide, and Technical Manual fully explain all OfficeServ 7200 voice and data features and functionality. These documents are available on the OfficeServ 7200 Technical Manual CD-ROM (L-CD-OS7200). Certain PDFs of the documents are available on the eCommerce website. Printed copies can be purchased online using the Samsung-FedEx Kinko's Print-on-Demand web site (https://psg.kinkos.com/samsung).

TRAINING AND CERTIFICATION

Dealers are not required to hold certification to sell OfficeServ 7200. However, dealers require technical training certification in order to receive Samsung technical support.

Dealers who are not certified can become certified by attending a Samsung Training on-line course available through the Training Group. For additional information on Training, please visit the eCommerce web site (<u>http://ebiz.samsungusa.com</u>).

If you have any questions regarding this notice, please contact your Regional Sales Manager or Samsung Technical Support via email us at <u>BCS.Support@samsung.com</u>.