



**Bulletin No.: 109\_iDCS500R2**

**March 15, 2004**

## **iDCS 500 Release 2 & OfficeServ™ IP Applications Product Launch**

Samsung Telecommunications America is pleased to announce the general availability of the iDCS 500 Release 2 software and new Voice over IP (VoIP) hardware/application support. This new product release will introduce the following hardware and software components listed below. Release 2 software also adds new features and enhancements described later in this document.

### **NEW RELEASE 2 SOFTWARE**

- 2.13aM for single cabinet systems and 2.13aL for multi-cabinet systems. It will support all the new hardware listed below.
- PCMMC OfficeServ™ Manager version 2.12 (also compatible with Release 1 iDCS500 systems).

### **NEW RELEASE 2 HARDWARE**

(With the exception of SVMi products, the new hardware listed below is only compatible with Release 2 software and will not work on Release 1 iDCS 500 systems):

- MGI2 (16 channel Media Gateway Interface card for Voice over IP services)
- ITP-5021D (21 button IP Keypad with 2 line LCD display)
- ITP-5012L (12 button IP Keypad with Large display)
- MCP2
- SCP2
- LCP2
- SVMi-16E, VPM-E, and VPMF-E (All compatible with iDCS 500 Release 1 systems)

### **NEW RELEASE 2 VOIP APPLICATIONS**

- IP Keypads which can be deployed remotely or locally
- Networking multiple iDCS500 systems over an IP network (Q-Sig over IP Networking).

---

Samsung Telecommunications America  
Business Communications Systems  
1301 East Lookout Drive  
Richardson, TX 75082

# iDCS 500 Release 2 & OfficeServ™ IP Applications

## NEW RELEASE 2 iDCS 500 DOCUMENTATION

The following documentation will be available for ordering soon:

- iDCS 500 Release 2 Technical Manual CD-ROM (Part Number: iDCS521)  
It requires Adobe® Reader® 6.01, included in the CD. Please check Adobe's website for Adobe® Reader® 6.01 system requirements ([www.adobe.com](http://www.adobe.com)).

The following documentation can be downloaded from Samsung's E-Business site at <http://ebiz.samsungusa.com/> by clicking on Sales and Marketing Support, Download Documents.

- iDCS 500 Release 2 General Description
- iDCS 500 Release 2 iDCS Keypad User Guide with SVM
- iDCS 500 Release 2 System Administration/Special Features Guide
- iDCS 500 Release 2 Standard Telephone User Guide
- OfficeServ ITP-5012L User Guide with SVM
- OfficeServ ITP-5021D User Guide with SVM

## SYSTEM SOFTWARE 2.13aM AND 2.13aL

Software version 2.13aM or 2.13aL must be used to run the new Release 2 hardware. It is also required to implement the new VoIP applications mentioned above. This software is not compatible with Release 1 iDCS500 systems. This software cannot run on systems with the old MCP, LCP, and SCP. It must have the MCP2, LCP2, and SCP2.

Version 2.13aM is used for single cabinet systems and 2.13aL is required for multi-cabinet systems. Both M and L versions support the same set of applications and features including System Networking (Both QSIG over PRI and QSIG over IP networking).

## NEW FEATURES AND CHANGES FOR RELEASE 2

- VoIP applications support
  - IP Keypad support (ITP-5021D, ITP-5012L)
  - QSIG over IP Networking of multiple iDCS500 systems.
- Call Forwarding
  - No Separate Forward External
  - All Forward types can have an Internal or External Destination.
- Programmed Messages
  - 15 Default System Messages and 5 per Individual Station.
  - Stations use MMC 115 to create their 5 individual Programmed messages

---

Samsung Telecommunications America  
Business Communications Systems  
1301 East Lookout Drive  
Richardson, TX 75082

## iDCS 500 Release 2 & OfficeServ™ IP Applications

- Text Messaging for OHVA Reply
  - System wide Text Messages have been Deleted
  - Each station enabled in MMC 611 can created their own 10 Text Messages using MMC 117 - NEW
  - 100 Blocks of 10 Assigned per Station in MMC 611 – NEW
- DID Call Count
  - Can Limit the Number of Calls to a DID Number (01 – 99)
- Group Auto Answer ON/OFF
  - Intercom & CO Calls to the Group Follow Station Setting
- Additional SMDR Options
  - When an IP Keyset is registered to the system;
    - The IP Address appears in the Account Field
    - The Station Number appears in the EXT Field
  - Set Relocation Activity
    - One Station appears in the EXT Field
    - The other appears in the Account Field
- MMC 400: Trunk On/Off
  - Repeat CLI on Tandem Trunk Connections
- MMC 890: PORT CLEAR – NEW
  - Call Clear – Drop all Calls on this Port
  - DB Initialize – Default this Port
- Numbering Plan Additions:
  - VSLT: 3501~                      – VDGP: 3401~
  - MGI: 3801~                        – IP STN: 3201~
  - VOIP NET: 8301~                – H323 TRK: 8401~
  - SIP TRK: 8501
- MMC 811: System Reset
  - COOL START added: System will not Read Smart-Media when Rebooting
- MMC 820: System Link ID
  - Signal Gateway IP Address added for Remote Networking Nodes
- Multiple VoIP MMCs added to Support a Flexible VoIP Solution

## iDCS 500 Release 2 & OfficeServ™ IP Applications

- This table indicates the only differences between M and L software. All other features are common to both M& L Software.

TABLE	“M” Version	“L” Version
Speed Dial Bins	2,000	2,500
IP Stations	120	240
IP Trunks	40	80
Station Groups	40	80
Virtual Stations	62	118
CID Translation	1,000	2,000
UCD Agent Pin Numbers	100	300

### PCMMC OFFICESERV MANAGER 2.12

Supports LAN connection to system as well as modem and serial port connections for configuring the system from your PC.

### NEW MCP2

Replaces Current MCP

- Requires Release 2 system software
- 32-bit Motorola MC68360 @ 50MHz
- 1 Mb Boot Flash ROM
- 32 Mb DRAM
- 4Mb SRAM (SuperCap backed customer database)
- Requires “Static” IP Address for IP Applications and PCMMC connection over the LAN
- New bootrom now supports 32Mb Smart Media cards (MCP2 is still compatible with older 16Mb Smart Media cards)
- Supports 2 SIO ports (Ports 2 & 3 on the IOM)
- Supports the MODEM Board
- Installs on IOM
- Eliminates Requirement for IPM Board
- Only Requires ESM to Run “L” Software
- Eliminates Requirement for LAN board. This is built into the MCP2 Card.
  - RJ-45 10/100 connector on MCP2 front

---

Samsung Telecommunications America  
Business Communications Systems  
1301 East Lookout Drive  
Richardson, TX 75082

# iDCS 500 Release 2 & OfficeServ™ IP Applications

## SCP2 AND LCP2

Replaces Current SCP & LCP

- Same functionality as existing SCP/LCP
- DRAM memory increased from 2 Mb to 4 Mb
- Required if “L” software is used
- LCP2 required for each expansion cabinet

## MGI2: VOICE OVER IP MEDIA GATEWAY INTERFACE CARD

The MGI2 converts TDM voice to IP packets and vice-versa using the G.729A and G.711 CODEC compression methods. The MGI 2 has 16 universal channels of VoIP and can be installed in any universal system slot of the iDCS 500 system. The MGI 2 card is supported by a powerful Virata Nitrogen 210-80 32-bit communications processor for the routing and bridging of calls. Up to 5 MGI2's can be installed in each cabinet and up to 15 per system. Each MGI2 takes up 8 Station Equivalent Power Units (SEPU). Each MGI2 channel can provide the following services on a per-channel basis. These services can be dynamically provided on each channel from call to call, or can be permanently dedicated to specific channels:

- H.323 v4 IP Trunking Interface
- SIP Trunking Interface
- ITP 5000 series IP Keyset support
- IP networking of multiple iDCS500 systems

## IP KEYSETS: ITP-5021D, ITP-5012L

The Samsung OfficeServ ITP-5000 series IP keysets provide full iDCS keyphone functionality locally or remotely on an IP network. The unique ITP keyphone instruments communicate with the iDCS 500 system in a proprietary IP message format to emulate full keyphone functionality. Working in conjunction with the MCP2 and an MGI2 card the ITP keyphone can access all station features and trunk facilities on the iDCS 500 system. The ITP keyphone can function on private networks (Intranet) or public IP networks (Internet). ITP keyphones support DHCP services and can also function behind NAT (Network Address Translation) routers. ITP-5000 Series phone supports PoE (Power over Ethernet IEEE 802.3af). This allows the ITP phones to draw power from a PoE compliant data switch eliminating the need for the local AC adaptor. There are two types of ITP-5000 series keyphones:

- **ITP-5021D**

The ITP-5021D has 21 programmable buttons and full traditional iDCS keyset functionality. The LCD display is a 2 line by 16 character display that informs the user as to call status and call states. The LCD also indicate incoming call parameters.

Traditional features such as Station Camp-on, Station Paging, Offhook Voice Announce are seamless with the ITP series keyphones. Other traditional buttons such as Transfer,

---

Samsung Telecommunications America  
Business Communications Systems  
1301 East Lookout Drive  
Richardson, TX 75082

## iDCS 500 Release 2 & OfficeServ™ IP Applications

Hold, Speaker, Volume control, Redial, Conference and the Samsung intuitive Softkeys make the ITP-5021D truly functional. In addition to the standard keyphone keys there is a navigation button that allows scrolling through various keyphone menu parameters.

The ITP 5021D Keyset has a built-in 2-port 10/100MB Switch. Simply plug the set into the LAN and then plug your PC into the second port of the Keyset. See the ITP-5000 Series Keyphone Users Guide for more details.

- **ITP-5012L**

The ITP-5012L is a large LCD display ITP keyphone. The large display features interactive softkeys to navigate through system keyphone features. The LCD display is a four inch silver screen. The large display supports a visual status bar, title bar, Icons associated with 12 selection buttons and call aid graphics. The LCD also indicates incoming call parameters via Icons. Other traditional buttons such as Transfer, Hold, Speaker, Volume control, Redial, Conference make the ITP-5012D truly functional. In addition to the standard keyphone keys the navigation button also allows scrolling through various keyphone menu parameters.

The ITP-5021D Keyset has a built-in 2-port 10/100MB Switch. Simply plug the set into the LAN and then plug your PC into the second port of the Keyset. See the ITP-5000 Series Keyphone Users Guide for more details.

### Q-SIG OVER IP NETWORKING

Multiple iDSC 500 systems can be networked together over an IP network. The same features available in iDCS 500 Release 1 Q-Sig over PRI networking will be available with the Release 2 QSIG over IP system networking. The only difference is that connectivity will be over IP networks. QSIG over PRI will still be supported in Release 2 iDCS 500 systems.

- iDCS 500 Release 2 systems can communicate via IP Media to provide voice and feature transport to multiple systems.
- MCP2 to MCP2 Data connections support System Status and Set-up/Tear Down Communications.
- MGI2 to MGI2 Data Connections support Voice Packet Communications.
- M & L Versions of Software support iDCS 500 Release 2 System Networking. This is no longer a separate Networking Software Package.

# iDCS 500 Release 2 & OfficeServ™ IP Applications

## UPGRADE PROCEDURES

To upgrade a Release 1 iDCS500 system to a Release 2 System, you will need to do the following:

- 1) Download the existing Release 1 system's database using the latest version of PCMMC OfficeServ Manager. V2.12 or higher. Please note that some MMCs such as MMC 861 and certain options in MMC 841 (ITP Rx Gain, SPKR and ITP Tx Gain, MIC) will only be accessible from KMMC programming. Future releases of PCMMC will support these MMCs.
- 2) On PCMMC, convert the downloaded database to a Release 2 iDCS500 format using the database conversion tool.
- 3) Power down the system, and replace the MCP, SCP and LCP cards with MCP2, SCP2, and LCP2 accordingly.
- 4) Clear the SRAM data on the MCP2 to make sure that it is defaulted (turn the SuperCap switch OFF then ON again).
- 5) Power on the system and upload the converted database from PCMMC.
- 6) You may want to enable the new features by programming the new or changed MMCs.

## TRAINING/CERTIFICATIONS

Contact your local RSM to find out the latest training and certifications requirements for iDCS 500 Release 2 products.

If you have any questions regarding this notice, please contact your Regional Sales Manager, your Customer Service Representative at the number provided below, or via email at [BCS.Sales@samsung.com](mailto:BCS.Sales@samsung.com)