

# **Intel<sup>®</sup>**

# **Signalling Interface Unit**

# **SIU131/231 to SIU520**

# **Migration Guide**

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Document Reference: U07SIU0B

## Revision History

ISSUE	DATE	CHANGES
A	13-May-02	Initial draft
B	16-May-02	Beta program release

### Disclaimer

The server may contain design defects or errors known as errata that may cause the product to deviate from published specifications.

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# 1. Introduction

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The purpose of this document is to aid the migration of customers from the SIU131 and SIU231 to the SIU520 Signalling Interface Unit. Some changes to the configuration and maintenance procedures have been made to better match the hardware platform and to allow the increased performance and resources of the units to be utilised. These changes are identified in this document. This document should be read in conjunction with the following documents:

U05SIU - SIU520/SG430 Hardware User Manual

U06SIU - SIU520 Signalling Interface Unit Developer's Manual

## 2. Hardware

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### 2.1 Chassis

The SIU520 chassis is a 2U high rack mountable server intended for mounting in a standard 600mm x 600mm rack (DIN 41494). It houses up to 2 plug in power supply modules, a server board (containing dual Intel® Pentium® III processors), CDROM, floppy disk drive, hard disk drive, four cooling fans and up to three signalling boards.

Figure 2-1 presents a view of the SIU520 chassis.



Figure 2-1. SIU520 Chassis

### 2.2 Boards

The SIU520 uses different signalling boards to the SIU131/231. The new boards support four links per-board and up to three signalling boards are supported. Each card has two E1/T1 ports marked 'L3' and 'L4' and a dual V11 port marked 'AUX' (Figure 2-2. Signalling Board Connector Positions). The boards are numbered from 1 to 3, with 1 being the bottom board.

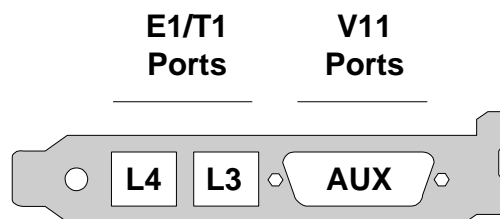


Figure 2-2. Signalling Board Connector Positions

## 2.3 Alarms

The alarm LED indicators now show the severity of the alarm condition (Critical, Major or Minor) rather than its category (Signalling, PCM or System). There is also an LED that indicates power system faults.

## 2.4 Power supplies

The SIU520 is supplied as standard with a single power supply but can optionally be supplied with a second power supply to give a 1+1 redundancy. See the SIU520/SG430 Hardware User Manual for further details.

## 3. Configuration

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### 3.1 FTP access

FTP access now requires a user name and password to transfer files onto the system. The user name 'siuftp' should be used. The password is initially set to 'siuftp'.

### 3.2 Circuit and dialogue resources

The SIU520 supports 16384 circuits for the circuit related protocols ISUP and TUP. For the non-circuit related protocols such as TCAP, MAP, INAP and IS-41 16384 simultaneous dialogues are supported.

### 3.3 Configuration commands

Many of the commands in the config.txt configuration file remain unchanged whilst others have changed only to increase value ranges. A list of commands and changes made is given below.

Parameter	Changed	Backwards Compatible	Details
SS7_BOARD	Y	N	Replaces PCCS6_BOARD command. e.g. <code>PCCS6_BOARD 0 5 0 0x0003</code> becomes <code>SS7_BOARD 1 SPCI2S 0x0003</code> See SIU520 Developer's Manual for details
LIU_CONFIG	Y	N	Configures the Line Interface Units for the PCM ports and was previously not mandatory. This command is now required. See SIU520 Developer's Manual for details and examples.
STREAM_XCON	Y	N	Controls the cross-connect switch on the board for connection of timeslots between the PCM ports. Not mandatory. See SIU520 Developer's Manual for details.
MTP_LINK	Y	N	The format of the command remains unchanged but different parameter values are needed for bpos, blink, and stream. The bpos value should match the appropriate value selected in the SS7_BOARD command. The blink value should now be in the range 0..3.

Parameter	Changed	Backwards Compatible	Details
			The stream value should now be in the range 0..3. Note that for port L3 a value of 2 should be used and a value of 3 for L4. Values 0 and 1 are reserved for V11 connections. See SIU520 Developer's Manual for details.
ISUP_CONFIG	Y	Y	Command supports more resources
ISUP_CFG_CCTGRP	Y	Y	Command supports more resources
TUP_CONFIG	Y	Y	Command supports more resources
TUP_CFG_CCTGRP	Y	Y	Command supports more resources
TCAP_CONFIG	Y	Y	Command supports more resources
TCAP_CFG_DGRP	Y	Y	Command supports more resources
MTP_ROUTE	Y	Y	Now supports 64 Routes
MTP_LINKSET	N	Y	
MTP2_TIMER	N	Y	
MTP_USER_PART	N	Y	
ISUP_TIMER	N	Y	
SCCP_CONFIG	N	Y	
SCCP_RSP	N	Y	
SCCP_RSS	N	Y	
SCCP_LSS	N	Y	
SCCP_CONC_LSS	N	Y	
SCCP_CONC_RSP	N	Y	
INAP_CONFIG	N	Y	
INAP_FE	N	Y	
INAP_AC	N	Y	

## 4. Maintenance

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### 4.1 MMI commands

The following table lists the MMI commands and indicates which have changed. The 'Backwards Compatible' and 'Print-out Changed' columns indicate if the command syntax or the resultant screen outputs have changed.

Command	Changed	Backwards Compatible	Print-out Changed	Details
ALLIP	Y	Y	Y	Additional information displayed
STPCP	Y	Y	Y	New format to support changes to LIU_CONFIG in config.txt
CNSWP	Y	Y	Y	Supports SIU520 release information
CNSYP	Y	Y	Y	Supports additional IPADRR2 and SUBNET2 parameters for second IP port
CNSYS	Y	Y	Y	Supports additional IPADRR2 and SUBNET2 parameters for second IP port
MSSYP	Y	Y	Y	Displays appropriate processor information
STBOP	N	Y	N	
STSLP	N	Y	N	
STHLP	N	Y	N	
STIPP	N	Y	N	
STRLP	N	Y	N	
STCGP	N	Y	N	
CNBUI	N	Y	N	
CNBUS	N	Y	N	
CNRDI	N	Y	N	
CNTMS	N	Y	N	
CNTMP	N	Y	N	
RSBOI	N	Y	N	
MNINE	N	Y	N	
MNINI	N	Y	N	
MNRSI	N	Y	N	
MMLOI	N	Y	N	

## 4.2 Software upgrade procedure

The software upgrade procedure has been changed slightly to simplify it by removing unnecessary manual reboots. The procedure is discussed in detail in section 10 of the SIU520 Developer's Manual. Note that cycling of the LEDs is no longer used to indicate the completion of the update procedure. An RSI session connected to the SIU will come back up again on completion of the update procedure.