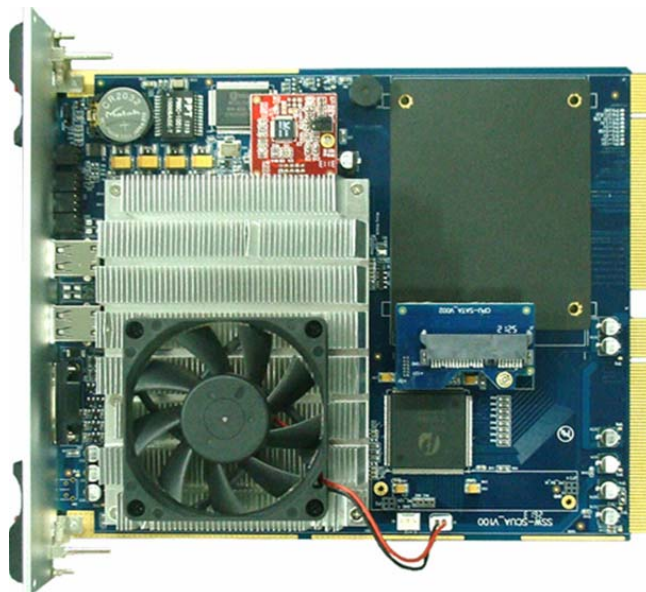**Synway UMCT Series**

SCU Series Switch Control Unit

Product Introduction

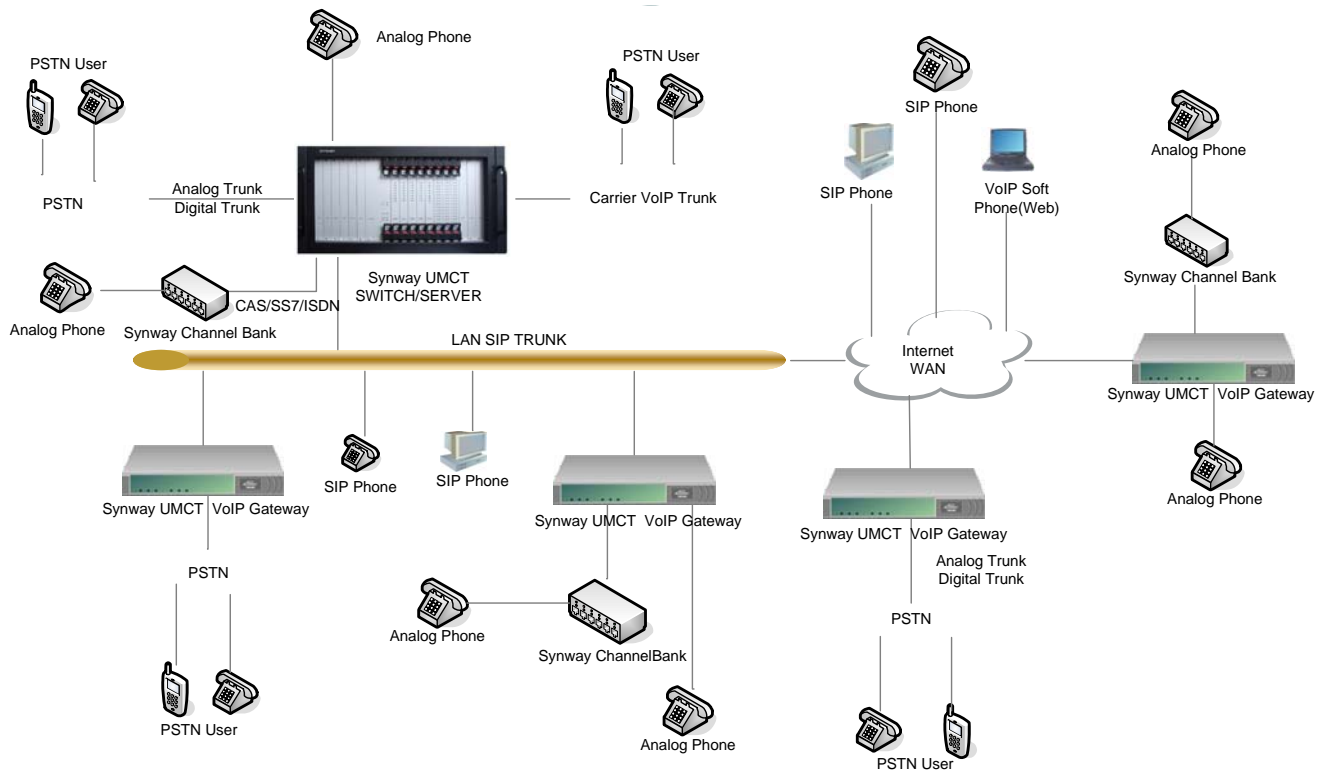**Synway Information Engineering Co., Ltd**

www.synway.net

➤ Brief Introduction

The SCU series switch control unit serves as the computer's mainboard unit for a UMCT switch, applicable to SSW020A, SSW030A, SSW080 Series. Together with the appropriate RCU outlet board, it constitutes the basic working unit of UMCT.

➤ Typical Application

The SCU, serving as the computer's mainboard unit for a UMCT switch, is required to work cooperatively with the SSW series UMCT intelligent switches. See the figure below for the typical application.

Functions

- Equipped with the industrial COM Express CPU Module and the common used PC extension interfaces, to realize most functions of a PC.

- Applicable to the SSW020A, SSW030A, SSW080 series UMCT intelligent switches.

- Installed with DDRII or DDRIII memory.

- Some support the RAID 0 and RAID 1 features which are integrated on the Intel chipset.

- Offers abundant choices of PC interfaces, including 4 USB interfaces on the front panel and up to 3 USB interfaces on the outlet, front and rear VGA display interfaces, up to 2 Ethernet interfaces, as well as audio interfaces on the outlet board.

Characteristic Features

- Adopts the Intel(R) architecture and uses the X86 platform as the main control unit. It has excellent hardware expansibility and good compatibility.

- No connect wires with the machine, easy to install and maintain.

- The industrial COM Express module, of advanced technology, stable performance and strong adaptability to environment, facilitates upgrading.

- The feature of hot-swap protection assures no damage to the mainboard during hot plugging.

- Able to provide various and flexible combinations of interfaces for different RCU boards.

- Some support the RAID 0 and RAID 1 features integrated on the Intel chipset, improving the HD speed and the data safety.

- Supports most of the mainstream operating systems, satisfying the requirements of different users.

- Supports all the applications based on the SynCTI driver platform as well as some open source software and applications like Asterisk.

- Adopts the standard notebook CPU, memory and hard disk, facilitating subsequent upgrade and maintenance.

- SCU08 has an extra interface for a 3.5-inch hard disk on the chassis so as to support the installation of enterprise hard disk, increasing the working reliability and prolonging the performance life.

- SCU08 and above models adopt the optimized shockproof architecture, greatly reducing the impact of fan vibration on HD speed and performance.

Technical Specifications

SCU03, SCU03-3

Dimensions (excluding handles)

Mainboard: $218.6 \times 174.5 mm^2$

Height of SCU03: 40.64mm

Height of SCU03-3: 60.96mm

Weight

SCU03 (including 1 HD): ≈800g

SCU03-3 (including 1 HD): ≈900g

Environment

Operating temperature: 0℃—40℃

Storage temperature: -20℃—85℃

Humidity: 8%— 90% non-condensing

Storage humidity: 8%— 90% non-condensing

Input/output Interface on Front Panel

USB 2.0 interface: 4

VGA interface: 1

Performance

Processor: Intel Core 2 Duo T5600

Memory: On-board 2G DDR2 SDRAM

 (667MHz or higher)

Chip set: Intel® 945GME

Video: VGA output support

Audio: AC97 support

Network card: LAN 10/100/1000M Ethernet controller (Intel 8257 3L chip)

Hard disk: Up to two 2.5-inch SATA hard disk, RAID 0 and RAID 1 support

USB: 4 USB 2.0 interfaces on front panel

Watchdog: Supported

Power Requirements

Maximum power consumption: ≤50W

Supported OS

Windows 2000 Professional SP4

Windows 2003 R2 Professional X32

Windows XP Professional

Windows Server2008

Most of mainstream Linux OS

Supported UMCT

SCU03: SSW020A

SCU03-3: SSW030A, SSW080 series

SCU04

Dimensions (excluding handles)

Mainboard: 218.6×174.5mm^2

Height: 40.64mm

Weight

SCU04 (including 1 HD): ≈750g

Environment

Operating temperature: 0℃—40℃

Storage temperature: -20℃—85℃

Humidity: 8%— 90% non-condensing

Storage humidity: 8%— 90% non-condensing

Input/output Interfaces on Front Panel

USB 2.0 interface: 4

VGA interface: 1

Performance

Processor: Intel Atom N270

Memory: On-board 1G DDR2 SDRAM (667MHz or higher)

Chip set: Intel® 945GSE + ICH7-M

Video: VGA output support

Audio: AC97support

Network card: LAN 10/100/1000M Ethernet controller (Intel 82574L chip)

Hard disk: Up to two 2.5-inch SATA hard disk

USB: 4 USB 2.0 interfaces on front panel

Watchdog: Supported

Power Requirements

Maximum power consumption: ≤50W

Supported OS

Windows 2003 R2 Professional X32

Windows XP Professional

Windows Server2008

Most of mainstream Linux OS

Supported UMCT

SSW020A, SSW030A, SSW080 series

SCU04P

Dimensions (excluding handles)

Mainboard: 218.6×174.5mm^2

Height: 40.64mm

Weight

SCU04P (including 1 HD): ≈750g

Environment

Operating temperature: 0℃—40℃

Storage temperature: -20℃—85℃

Humidity: 8%— 90% non-condensing

Storage humidity: 8%— 90% non-condensing

Input/output Interfaces on Front Panel

USB 2.0 interface: 4

VGA interface: 1

Performance

Processor: Intel Atom N2600

Memory: On-board 2G DDR3 SDRAM (1066MHz or higher)

Chip set: Intel® NM10

Video: VGA output support

Audio: Doesn't support

Network card: LAN 10/100/1000M Ethernet controller (Intel 82583V chip)

Hard disk: Up to two 2.5-inch SATA hard disk

USB: 4 USB 2.0 interfaces on front panel

Watchdog: Supported

Power Requirements

Maximum power consumption: ≤30W

Supported OS

Windows 2003 R2 Professional X32

Windows XP Professional

Windows Server2008

The relatively new Linux OS, such as CentOS 6.4 64bit

Supported UMCT

SSW020A, SSW030A, SSW080 series

SCU06

Dimensions (excluding handles)

Mainboard: 218.6×174.5mm^2

Height: 60.96mm

Weight

SCU06 (including 1 HD): ≈850g

Environment

Operating temperature: 0℃—40℃

Storage temperature: -20℃—85℃

Humidity: 8%— 90% non-condensing

Storage humidity: 8%— 90% non-condensing

Input/output Interfaces on Front Panel

USB 2.0 interface: 4

VGA interface: 1

Performance

Processor: Intel Core2 DUO P7350

Memory: On-board 4G SODIMM DDR3 1066 Memory

Chip set: Intel GM45+ICH9M

Video: VGA output support

Network card: LAN 10/100/1000M Ethernet controller (Intel 82567LM chip)

Hard disk: Up to two 2.5-inch SATA hard disk

USB: 4 USB 2.0 interfaces on front panel

Watchdog: Supported

Power Requirements

Maximum power consumption: ≤50W

Supported OS

Windows 2003 R2 Professional

Windows XP Professional

Windows Server2008

Windows 7

Most of mainstream Linux OS

Supported UMCT

SSW030A, SSW080 series

SCU06(2.0)

Dimensions (excluding handles)

Mainboard: 218.6×174.5mm^2

Height: 60.96mm

Weight

SCU06(2.0) (including 1 HD): ≈900g

Environment

Operating temperature: 0℃—40℃

Storage temperature: -20℃—85℃

Humidity: 8%— 90% non-condensing

Storage humidity: 8%— 90% non-condensing

Input/output Interfaces on Front Panel

USB 2.0 interface: 4

VGA interface: 1

Performance

Processor: Intel Core2 DUO P8600

Memory: On-board 4G SODIMM DDR3 1066 Memory

Chip set: Intel GM45+ICH9M-E

Video: VGA output support

Audio: High Definition Audio support

Network card: LAN 10/100/1000M Ethernet controller (Intel 82574L chip)

Hard disk: Up to two 2.5-inch SATA hard disk

USB: 4 USB 2.0 interfaces on front panel

Watchdog: Supported

Power Requirements

Maximum power consumption: ≤50W

Supported OS

Windows 2003 R2 Professional

Windows XP Professional

Windows Server2008

Windows 7

Most of mainstream Linux OS

Supported UMCT

SSW030A, SSW080 series

SCU07, SCU07(8G)

Dimensions (excluding handles)

Mainboard: 218.6×174.5mm^2

Height: 60.96mm

Weight

SCU07 (including 1 HD): ≈950g

Environment

Operating temperature: 0℃—40℃

Storage temperature: -20℃—85℃

Humidity: 8%— 90% non-condensing

Storage humidity: 8%— 90% non-condensing

Input/output Interfaces on Front Panel

USB 2.0 interface: 4

VGA interface: 1

Performance

Processor: Intel Core i7-620LE Processor (2.0GHz, 4MB Cache)

Memory:

SCU07: On-board 4G SODIMM DDR3 1066 Memory

SCU07(8G): On-board 8G SODIMM DDR3 1066 Memory

Chip set: Intel® QM57 Chipset

Video: VGA output support

Audio: High Definition Audio support

Network card: LAN 10/100/1000M Ethernet controller (Intel 82577LM chip)

Hard disk: Up to two 2.5-inch SATA hard disk

USB: 4 USB 2.0 interfaces on front panel

Watchdog: Supported

Power Requirements

Maximum power consumption: ≤50W

Supported OS

Windows 2003 R2 Professional

Windows XP Professional

Windows Server2008

Most of mainstream Linux OS

Supported UMCT

SSW030A, SSW080 series

SCU08

Dimensions (excluding handles)

Mainboard: 218.6×174.5mm^2

Height of SCU08L: 40.64mm

Height of SCU08: 60.96mm

Weight

SCU08 (including 1 HD): ≈950g

Environment

Operating temperature: 0℃—40℃

Storage temperature: -20℃—85℃

Humidity: 8%— 90% non-condensing

Storage humidity: 8%— 90% non-condensing

Input/output Interfaces on Front Panel

USB 2.0 interface: 4

VGA interface: 1

Performance

Processor: Intel® Core™ i7 ivy bridge ® Processor, basic frequency 2.2GHz or above, such as i7-3632QM

Memory: (standard) 8G SODIMM DDR3 1333 Memory; supports up to 16GB memory

Chip set: Intel® QM77 Chipset

Video: VGA output support

Audio: High Definition Audio support

Network card: LAN 10/100/1000M Ethernet controller (Intel 82579LM chip)

Hard disk: Up to two 2.5-inch SATA hard disks

Another 3.5-inch hard disk support on latest SSW080 series

USB: Four USB 2.0 interfaces on front panel

Watchdog: Supported

Power Requirements

Maximum power consumption: ≤50W

Supported OS

Most 32-bit and 64-bit OS, such as:

Windows 2008 R2 Professional

Windows XP Professional

Windows Server2003

The relatively new Linux OS

Recommended: Windows Server2008 R2

or CentOS 6.4 64bit

Supported UMCT

SCU08: SSW030A, SSW080 series

SCU08L: SSW020A

SCU09

Dimensions (excluding handles)

Mainboard: 218.6×174.5mm^2

Height of SCU09L: 40.64mm

Height of SCU09: 60.96mm

Weight

SCU09 (including 1 HD): ≈950g

Environment

Operating temperature: 0℃—40℃

Storage temperature: -20℃—85℃

Humidity: 8%— 90% non-condensing

Storage humidity: 8%— 90% non-condensing

Input/output Interfaces on Front Panel

USB 2.0 interface: 4

VGA interface: 1

Performance

Processor: Intel® Core™ i5-M3210 Processor

Memory: (standard) 4G SODIMM DDR3L 1333 Memory; supports up to 8GB memory

Chip set: Intel® QM77 Chipset

Video: VGA output support

Audio: High Definition Audio support

Network card: LAN 10/100/1000M Ethernet controller (Intel 82579LM chip)

Hard disk: Up to two 2.5-inch SATA hard disks

Another 3.5-inch hard disk support on latest SSW080 series

USB: Four USB 2.0 interfaces on front panel

Watchdog: Supported

Power Requirements

Maximum power consumption: ≤50W

Supported OS

Most 32-bit and 64-bit OS, such as:

Windows 2008 R2 Professional

Windows XP Professional

Windows Server2003

The relatively new Linux OS

Recommended: Windows Server2008 R2

or CentOS 6.4 64bit

Supported UMCT

SCU09: SSW030A, SSW080 series

SCU09L: SSW020A

SCU10L

Dimensions (excluding handles)

Mainboard: 218.6×174.5mm^2

Height: 40.64mm

Weight

SCU10L (including 1 HD): ≈950g

Environment

Operating temperature: 0℃—40℃

Storage temperature: -20℃—85℃

Humidity: 8%— 90% non-condensing

Storage humidity: 8%— 90% non-condensing

Input/output Interfaces on Front Panel

USB 2.0 interface: 4

VGA interface: 1

Performance

Processor: Intel® Atom E3845 Processor

Memory: (standard) 4G SODIMM DDR3L 1333 Memory; supports up to 8GB memory

Chip set: Intel® Atom™ SOC Chipset

Video: VGA output support

Audio: High Definition Audio support

Network card: LAN 10/100/1000M Ethernet controller (Intel 1211AT chip)

Hard disk: Up to two 2.5-inch SATA hard disks

USB: Four USB 2.0 interfaces on front panel

Watchdog: Supported

Power Requirements

Maximum power consumption: ≤50W

Supported OS

Most 32-bit and 64-bit OS, such as:

Windows 2008 R2 Professional

Windows 7

The relatively new Linux OS

Recommended: Windows Server2008 R2

or CentOS 6.4 64bit

Supported UMCT

SSW020A, SSW030A, SSW080 series

RCU01

Dimension

Mainboard: 90×115.1mm^2

Height: 20.32mm

Weight

≈ 55g

Environment

Operating temperature: 0℃—40℃

Storage temperature: -20℃—85℃

Humidity: 8%— 90% non-condensing

Storage humidity: 8%— 90% non-condensing

Input/output Interfaces

USB 2.0 interface: 2

VGA interface: 1

Network interface: 1 (provided by SCU)

Sound card interface: 2 ϕ3.5mm stereophonic jacks

Key: 1 (power key on SCU board)

Supported UMCT

SSW030A, SSW080 series

RCU02

Dimension

Mainboard: 180×115.1mm^2

Height: 20.32mm

Weight

≈ 120g

Environment

Operating temperature: 0℃—40℃

Storage temperature: -20℃—85℃

Humidity: 8%— 90% non-condensing

Storage humidity: 8%— 90% non-condensing

Input/output Interfaces

USB 2.0 interface: 3

VGA interface: 1

Network interface:

WAN: 1 (provided by SCU)

LAN: 4 (implemented by LAN9500 USB network card plus 1switching chip)

Sound card interface: 2 ϕ3.5mm stereophonic jacks (corresponding to SPK and MIC on the sound card of SCU)

Key: 1 (power key on SCU board)

Supported UMCT

RCU04

Dimension

Mainboard: 90×115.1mm^2

Height: 40.64mm

Weight

≈60g

Environment

Operating temperature: 0℃—40℃

Storage temperature: -20℃—85℃

Humidity: 8%— 90% non-condensing

Storage humidity: 8%— 90% non-condensing

Input/output Interfaces

USB 2.0 interface: 2

VGA interface: 1

Network interface:

WAN: 1 (provided by SCU)

LAN: 1 (provided by on-board LAN9500 USB network card)

Sound card interface: none

Key: 1 (power key on SCU board)

Supported UMCT

SSW030A, SSW080 series

Purchasing Guide

The purchasing guide for SCU and RCU:

Type	Model	Performance	SSW020A	SSW020A(2.0)	SSW030A	SSW080 Series
SCU	SCU03	Intel Core2 T5600/1.83GHz 2/2	Supported	Supported		
	SCU03-3	Intel Core2 T5600/1.83GHz 2/2			Supported	Supported
	SCU04	Intel Atom N270/1.6GHz 1/2	Supported	Supported	Supported	Supported
	SCU04P	Intel Atom N2600/1.6GHz 1/2	Supported	Supported	Supported	Supported
	SCU06	Intel Core2 P7350/2.0GHz 2/2			Supported	Supported
	SCU06(2.0)	Intel Core2 P8600/2.4GHz 2/2			Supported	Supported
	SCU07	Intel Core i7-620LE/2.0GHz			Supported	Supported
	SCU07(8G)	Intel Core i7-620LE/2.0GHz			Supported	Supported
	SCU08	Intel Core i7-3632QM/2.2GHz			Supported	Supported
	SCU08L	Intel Core i7-3632QM/2.2GHz	Supported	Supported		
	SCU09	Intel Core I5-3210M/2.5GHz			Supported	Supported
	SCU09L	Intel Core I5-3210M/2.5GHz	Supported	Supported		
	SCU10L	Intel Core E3845M/1.91GHz	Supported	Supported	Supported	Supported
RCU	RCU01	1 WAN			Supported	Supported
	RCU02	1 WAN + 4 LAN			Supported	Supported
	RCU04	1 WAN + 1 LAN			Supported	Supported

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TIPS

⊞ **All the content and data herein have been scrupulously checked. However, we do not guarantee the absence of errors.**

⊞ **Product specifications and relevant data are subject to conditions on the purchase contract.**

⊞ **Our company reserves the right to modify this document without prior notice and the right for final explanation.**