SCU Series Switch Control Unit

Product Introduction

Synway Information Engineering Co., Ltd

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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: 218.6×174.5mm²
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: 218.6×174.5mm²
- 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: AC97 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 X32
- Windows XP Professional
- Windows Server2008
- Most of mainstream Linux OS

Supported UMCT
- SSW020A, SSW030A, SSW080 series

SCU04P

Dimensions (excluding handles)
- Mainboard: 218.6×174.5mm²
- 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: 218.6×174.5mm²
- 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

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</table>

**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: 218.6×174.5mm²  
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  

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: 218.6×174.5mm²  
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  

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  
- Windows 7  
- Most of mainstream Linux OS  

Supported UMCT  
SSW030A, SSW080 series

SCU08  
Dimensions (excluding handles)  
Mainboard: 218.6×174.5mm²
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

Dimensions (excluding handles)
Mainboard: 218.6×174.5mm²
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) 8G 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

SCU09
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
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
- Height: 40.64mm

Weight
- SCU10L (including 1 HD): ≈950g

Environment
- Operating temperature: 0 ℃—40 ℃
- Storage temperature: -20 ℃—85 ℃
- 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 MHz
- 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 Server 2008 R2 or CentOS 6.4 64bit

Supported UMCT
- SSW020A, SSW030A, SSW080 series

RCU01

Dimension
- Mainboard: 90×115.1mm
- Height: 20.32mm

Weight
- ≈55g

Environment
- Operating temperature: 0 ℃—40 ℃
- Storage temperature: -20 ℃—85 ℃
- 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 3.5mm stereophonic jacks
- Key: 1 (power key on SCU board)

Supported UMCT
- SSW030A, SSW080 series

RCU02

Dimension
- Mainboard: 180×115.1mm
- 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 1 switching chip)
- Sound card interface: 2 3.5mm stereophonic jacks (corresponding to SPK and MIC on the sound card of SCU)
- Key: 1 (power key on SCU board)
Supported UMCT

SSW030A, SSW080 series

RCU04

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

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<td>SCU03-3</td>
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<td>RCU04</td>
<td>1 WAN + 1 LAN</td>
<td>Supported</td>
<td>Supported</td>
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★ Technical/sales Support

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