



SMSC PRODUCT SELECTION GUIDE

SMSC: AT A GLANCE



SMSC is a global, fabless semiconductor company serving a diversified set of applications in the consumer electronics, automotive infotainment, computing and industrial markets.

The Company develops semi-custom and application-specific standard products that allow users to access or transfer their digital assets with convenience and speed.

SMSC has developed leadership positions in providing analog/mixed-signal solutions to many of the world's leading OEMs and ODMs, through products employing one or more of the following technologies:

Ethernet, ARCNET, MOST®, Hi-Speed USB or various analog sensors and transceivers.

Products include USB 2.0 hubs and mass storage devices, embedded controllers and companion devices, Ethernet and embedded networking devices, networking co-processors and in-vehicle interface controllers optimized to deliver high bandwidth entertainment and navigation content.

SMSC outsources its manufacturing to foundries in Singapore, Taiwan and Korea. SMSC does maintain a significant test capability at its New York facility where all of its quality assurance tests and much of its production testing is performed. Some production testing and all packaging and assembly is performed by outside contractors who supply their product and services to conform to SMSC's documented procurement specifications.

SMSC has been certified as an ISO 9001:2000 supplier. This achievement represents their continuing commitment to maintaining a world-class quality system.

SMSC is headquartered in Hauppauge, New York with operations in North America, Asia and Europe. Engineering design centres are located in Arizona, New York, Texas, Germany and Sweden.



SMSC CORPORATE PRODUCT OVERVIEW

MARKETS

	Applications	Hi-Speed USB 2.0 Connectivity	Ethernet	MOST®	PC Architecture	Environmental Monitoring & Control (EMC)	ARCNET	CircLink™
Automotive	Multimedia, Connectivity and Infotainment System	•	•	•	•		•	
Communications Equipment	Cellular Base Stations, Wireless Routers, Residential Gateways, IP Telephony	•	•	•		•	•	•
Consumer Electronics	Digital Cameras, HDTVs, Set-top Boxes, Digital Media Adapters, DVD & HDD Recorders, Cellular Mobile Handsets, Portable Media Players, Portable GPS/PND	•	•	•	•	•		
Embedded PCs & Servers	Embedded Web Servers, Tower, Rack & Blade Servers, Single Board Computers, Industrial PCs, PC/104 Modules	•	•		•	•		
Enterprise Hardware	ATMs, Printers, Copiers, Kiosks, POS Systems, Projectors, SANs, Tape Storage, Video Conferencing	•	•	•	•	•	•	•
Gaming Equipment	Gaming Systems, Multi-Player Arcade Games, Game Consoles, Slot Machines	•	•	•	•	•	•	•
Home Appliances	Cooking Equipment, Refrigerators, Washing Machines, Dryers		•			•	•	•
Industrial/ Building Automation	HVAC Systems, Lighting Systems, Fire & Alarm Systems, Access Control Systems, Elevator Systems, Factory Control Systems, Food Processing Equipment	•	•	•		•	•	•
PC Peripherals	Flash Media Drives, Rotating Media, Display Monitors, PDA Docking, Port Replicators, USB Hubs, Infrared Connectivity	•			•			
Security	Security & Alarm Systems, Video Surveillance		•	•	•	•	•	•

BENEFITS

Hi-Speed USB 2.0 Connectivity	Ethernet	MOST	Mobile I/O	Desktop, Server & Embedded I/O	Environmental Monitoring & Control (EMC)	ARCNET & CircLink™
<ul style="list-style-type: none"> • Robust Hi-Speed USB 2.0 and storage compatibility across a wide range of digital media applications • Flexible, application-oriented design support • Broadest line of Hi-Speed USB 2.0 hub controllers for computing, consumer and industrial applications • Complete family of stand-alone Hi-Speed USB 2.0 transceivers • Performance-oriented, Hi-Speed USB 2.0 flash media readers 	<ul style="list-style-type: none"> • Leader in non-PCI Ethernet solutions • PCI and non-PCI multi-media co-processors • Full set of software drivers and comprehensive design-in support • Comprehensive product line and roadmap for a wide variety of customer needs including stand-alone Ethernet transceivers 	<ul style="list-style-type: none"> • Leader in high-bandwidth automotive infotainment systems • Technology also designed for application in consumer infotainment markets • Broad standardization from the physical layer to application level • Various speed-grades and physical layers • Streaming, packet, and control data transport • High flexibility and scalability • Approved to carry DVD content using Digital Transmission Content Protection (DTCPC) 	<ul style="list-style-type: none"> • Complete mobile solutions, including Embedded Controller, Keyboard Controller (KBC) and docking support • Highly integrated solutions • Low-power, small-footprint products 	<ul style="list-style-type: none"> • Leader in platform thermal management • Provides value through integration of I/O, hardware monitoring, fan control and discrete logic • Desktop PC, server and single board computer, industrial computer, POS, ATM, set-top box and other embedded applications 	<ul style="list-style-type: none"> • State of the art environmental monitoring and control for PC, server and embedded systems applications • Advanced features to speed design-in, minimising or eliminating the need for CPU calibration or board-level measurements • Broad portfolio of solutions including highly accurate temperature sensors, fan, voltage and power management technologies 	<ul style="list-style-type: none"> • Deterministic and reliable protocol • Easy to use with little software development • Enables a flexible and modular system design

SMSC ETHERNET & NETWORKING PRODUCTS

LEADER IN NON-PCI ETHERNET SOLUTIONS

- Full set of software drivers, eval kits, developments boards and support material including reference designs
- **LANCheck™** Online Review
- Comprehensive product line and roadmap for a wide variety of customer needs including stand-alone Ethernet transceivers
- 32-bit and 16-bit options for high-performance or cost-sensitive / competitive solutions
- Industrial temperature specification available
- As a technical distributor, Avnet Memec provides a range of SMSC based embedded Ethernet / Fast Ethernet solutions, using MCUs such as the ZiLOG ez80F91 Acclaim!Plus with integrated 10/100 MAC, TCP/IP Stack and RTOS Support

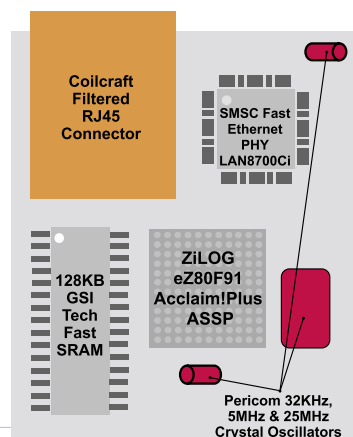
SMSC has just released the LAN9420, a high-performance single chip Ethernet controller with HP Auto-MDIX and PCI interface. The LAN9420 is fully-compliant with IEEE802.3/802.3u, and supports 10BASE-T and 100BASE-TX, full-duplex flow control, RX/TX checksum offload, industrial temperature, and operates flexible address filtering modes. The LAN9420's PCI interface is V.3.0 compliant, 32-Bit/33-MHz, and the descriptor-based scatter-gather DMA engine enables zero copy.

Three additional new products from SMSC include the family of 2 and 3 port Ethernet Switch controllers: the LAN9311, LAN9312, and LAN9313. These devices provide flexible interfaces to SOCs, either 16 or 32-Bit, Non-PCI or MII. The LAN9311/9312/9313 are fully-compliant with IEEE 802.3 standards and integrate a pair of PHYs supporting HP Auto-MDIX. Various value-added managed functions such as VLAN, IGMP Snooping, QoS, IEEE1588 etc, and industrial temperature are also supported. Additional information on all these new products can be obtained from Avnet Memec Europe.

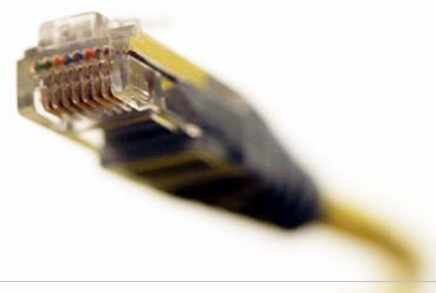
NETWORKING PRODUCTS

Product Categories	Product Name	Discription
Ethernet Controllers	LAN9218	Highest Performance, 10/100 Non-PCI Integrated MAC/PHY, 32-Bit in a 100-Pin TQFP Package
	LAN9218i	Highest Performance, 10/100 Non-PCI Integrated MAC/PHY (Industrial Temperature Range), 32-Bit in a 100-Pin TQFP Package
	LAN9217	High-Performance, 10/100 Non-PCI Integrated MAC/PHY, 16-Bit in a 100-Pin TQFP Package
	LAN9215	Superior Performance, 10/100 Non-PCI Integrated MAC/PHY, 16-Bit in a 100-Pin TQFP Package
	LAN9215i	Superior Performance, 10/100 Non-PCI Integrated MAC/PHY (Industrial Temperature Range), 16-Bit in a 100-Pin TQFP Package
	LAN9118	Highest Performance, 10/100 Non-PCI Integrated MAC/PHY, 32-Bit in a 100-Pin TQFP Package
	LAN9117	High-Performance, 10/100 Non-PCI Integrated MAC/PHY, 16-Bit in a 100-Pin TQFP Package
	LAN9116	Superior Performance, 10/100 Non-PCI Integrated MAC/PHY, 32-Bit in a 100-Pin TQFP Package
	LAN9115	Superior Performance, 10/100 Non-PCI Integrated MAC/PHY, 16-Bit in a 100-Pin TQFP Package
Ethernet Transceivers	LAN91C111*	10/100 Non-PCI Integrated MAC/PHY in a 128-Pin QFP/TQFP Package
	LAN91C111i*	10/100 Non-PCI Integrated MAC/PHY (Industrial Temperature Range) in a 128-Pin QFP/TQFP Package
	LAN8700 / LAN8700C	Small Footprint, 10/100 Transceiver with HP Auto-MDIX, Featuring SMSC flexPWR™ Technology in a 36-Pin QFN Package
	LAN8700i / LAN8700Ci	Small Footprint, 10/100 Transceiver (Industrial Temperature Range) with HP Auto-MDIX, Featuring SMSC flexPWR™ Technology in a 36-Pin QFN Package
	LAN8187 LAN8187i LAN83C185	10/100 Transceiver with HP Auto-MDIX, Featuring SMSC flexPWR™ Technology in a 64-Pin TQFP Package 10/100 Transceiver (Industrial Temperature Range) with HP Auto-MDIX, Featuring SMSC flexPWR™ Technology in a 64-Pin TQFP Package 10/100 Transceiver in a 64-Pin TQFP Package

*mature: not for new designs



AVNET MEMEC INDUSTRIAL FAST ETHERNET REFERENCE DESIGN



SMSC LANCHECK™ ONLINE REVIEW: SPEED ETHERNET DESIGNS TO MARKET WITH ADDED CONFIDENCE

WHAT IS LANCHECK ONLINE REVIEW?

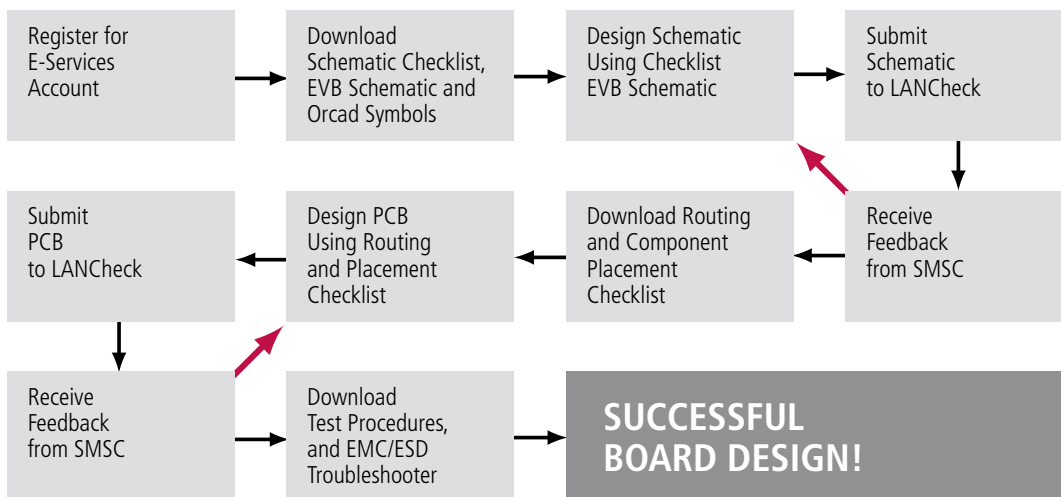
SMSC’s LANCheck Online Review is a personalized, value-added service exclusive to SMSC and available at no charge to customers who have selected their Ethernet offerings for application design-in. LANCheck will support the design process by providing guidance through the complete design cycle – from initial schematic design to PCB design.

After an initial LANCheck registration, customers may submit the design schematic, PCB layout, or PCB routing design information to a confidential and secure environment where it is promptly analyzed by SMSC’s engineers who will provide personalized feedback.

WHY USE LANCHECK ONLINE REVIEW?

- Accelerate design cycle, reduce design risk and improve time-to-market
- Minimize design resources required for multiple iterations of design review, schematics review and board fabrication
- Maximize the benefit of SMSC’s expertise in Ethernet design support across various markets and applications
- Access SMSC’s high-level application design-in expertise at no additional charge
- Address EMI and ESD compliance and regulatory requirements during the schematic design phase
- Utilize tools to help select proper magnetics for designs

LANCHECK ONLINE REVIEW – PATHWAY TO A SUCCESSFUL ETHERNET DESIGN



SMSC EMBEDDED & INDUSTRIAL COMMUNICATION SOLUTIONS

- ARCNET has many characteristics that make it ideal for industrial and embedded networking environments. This is due to the deterministic nature of ARCNET, its high reliability and fault tolerance, and its adaptability to a wide variety of cabling media and configurations. SMSC is the market leader in ARCNET devices and has a full spectrum of solutions to meet any customer's price and performance needs.
- CirLink™, an ARCNET derivative, further improves on the protocol by eliminating the need for external processor and is optimized as a wire-replacement technology inside industrial and commercial machines.

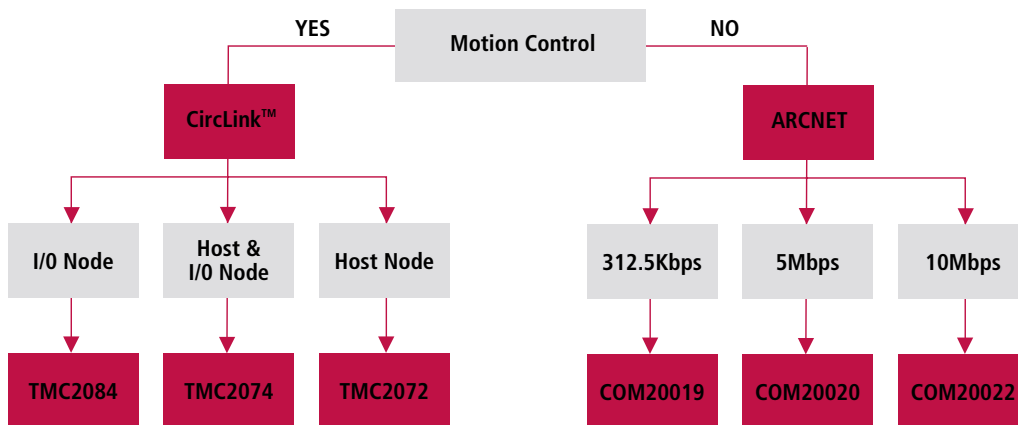
	ARCNET Controllers					CirLink™ Controllers		
Part Number	COM20019I	COM20020I	COM20020I 3.3V	COM20022I	COM20022I 3.3V	TMC2074	TMC2072	TMC2084
Package	28PLCC 48TQFP	28PLCC 48TQFP	28PLCC 48TQFP	48TQFP	48TQFP	128 VTQFP	100 TQFP	48 TQFP
Temperature	-40 C° - +85 C°	-40 C° - +85 C°	-40 C° - +85 C°	-40 C° - +85 C°	-40 C° - +85 C°	0 C° - +70 C°	0 C° - +70 C°	0 C° - +70 C°
Power Supply	+5V	+5V	+3.3V	+5V	+3.3V	+3.3V w/ +5V tolerance	+3.3V w/ +5V tolerance	+3.3V w/ +5V tolerance
Bus Width	8 Bit	8 Bit	8 Bit	8 / 16 Bit	8 / 16 Bit	8 / 16 Bit	8 / 16 Bit	N/A
Input/Output	N/A	N/A	N/A	N/A	N/A	16 in, 16 out at CPU less mode	N/A	0 in, 32 out 8 in, 24 out 16 in, 16 out
Data Rate	156.25 - 312.5 Kbps	156.25 Kbps - 5 Mbps	156.25 Kbps - 5 Mbps	156.25 Kbps - 10 Mbps	156.25 Kbps - 10 Mbps	156.25 Kbps - 5 Mbps	156.25 Kbps - 5 Mbps	156.25 Kbps - 5 Mbps
RAM	2K x8	2K x8	2K x8	2K x8	2K x8	1K x8	1K x8	N/A
Packet Size	1 - 508 bytes	1 - 508 bytes	1 - 508 bytes	1 - 508 bytes	1 - 508 bytes	1 - 253/125/61/29 bytes	1 - 253/125/61/29 bytes	8 bytes
Maximum Node ID	255 nodes	255 nodes	255 nodes	255 nodes	255 nodes	3/7/15/31 nodes	3/7/15/31 nodes	15 nodes
HUB Function	None	None	None	None	None	3 ports	3 ports	N/A
Microcontroller Interface	x86/68XXX/SH etc	x86/68XXX/SH etc	x86/68XXX/SH etc	x86/68XXX/SH etc	x86/68XXX/SH etc	x86/68XXX/SH etc	x86/68XXX/SH etc	N/A
Supporting Transceiver	HYC2000 RS-485 Optical	HYC9088/2000/4000 RS-485 Optical	HYC9088/2000/4000 RS-485 Optical	HYC9088/2000/4000 RS-485 Optical	HYC9088/2000/4000 RS-485 Optical	HYC2000/4000 RS-485 Optical CAN Transceiver	HYC2000/4000 RS-485 Optical CAN Transceiver	HYC2000/4000 RS-485 Optical CAN Transceiver

- ARCNET is easy to use, and as a versatile networking solution, it is ideally suited to interconnect portions of an embedded system to create a more flexible and modular design. In terms of the International Organisation of Standards OSI (Open Systems Interconnect) Reference Model, ARCNET provides the Physical and Data-link layers. In other words, ARCNET provides for the successful transmission and reception of a data packet between two network nodes. A node refers to an ARCNET controller chip and cable transceiver connected to the network.
- CirLink is derived from ANSI 878, enhancing its token passing protocol. CirLink's unique networking capabilities allow engineers to design a more modular flexible embedded system while reducing the system wiring costs. An easy to use communications protocol, CirLink has minimal CPU load and requires little software to implement. CirLink is perfect for embedded applications needing real-time control such as automatic telling, gaming, home appliances and vending machines.

ARCNET Hybrid Transceivers					
Part Number	HYC9088A R	HYC9088A R-LF	HYC2000	HYC4000	HYC5000
Package	20 SIP	20 SIPN/Lead Free	8 SIP	8 SIP	8 SIPN/Lead Free
Temperature	0 C° - +70 C°	0 C° - +70 C°	0 C° - +70 C°	0 C° - +70 C°	0 C° - +70 C°
Power Supply	±5V	±5V	+5V	+5V	+5V
Signal Type	Di-Pulse	Di-Pulse	Bi-Polar	Bi-Polar	Bi-Polar
Data Rate	2.5Mbps	2.5Mbps	156.25Kbps - 625Kbps	2.5Mbps - 10Mbps	2.5Mbps - 10Mbps
Supporting Topology	Bus/Star/Mix	Bus/Star/Mix	Bus/Star/Mix	Bus/Star/Mix	Bus/Star/Mix
Supporting Cables	Twist Pair/Coax	Twist Pair/Coax	Twist Pair	Twist Pair/Coax	Twist Pair/Coax
Supporting Network	ARCNET	ARCNET	ARCNET	ARCNET	ARCNET

ARCNET Hub	
Part Number	TMC2005
Package	60QFP
Temperature	0 C° - +85 C°
Power Supply	+5V
Data Rate	156.25 Kbps - 10 Mbps
Cable	Twist Pair/Coax/Optical
Number of Ports	5 ports
Supporting Network	ARCNET
Supporting Transceivers	HYCs/RS-485/Optical

REAL TIME / INTERNAL NETWORKING



ALL ARCNET PRODUCTS SUPPORT INDUSTRIAL TEMPERATURE



SMSC USB SOLUTIONS

- SMSC is a leader in providing Hi-Speed USB solutions and is uniquely positioned to provide full USB solutions that include silicon, firmware, software drivers and reference designs, for example, the USB Transceiver product family with Marvell PXA Monahans PXA Processors
- In addition to mixed signal design and software support for Hi-Speed USB, they enable new solutions with low power and use of cost effective silicon process nodes.
- SMSC products serve the USB mass storage, hub and transceiver markets. SMSC lead the market in producing industrial temperature devices, and ensure continuity of supply with a USB device life-span that usually exceeds most end product life-cycles.
- USBCheck™ is a value-added design review service SMSC provides to customers who have selected SMSC USB devices for their product designs. From initial schematic design, PCB design, and testing cycles, SMSC offers guidance and answers to any questions arising during every step of the design cycle of a customer's new product.

USB CARD READER / COMBO / DISK DRIVE & TRANSCIEVER PRODUCTS

CARD READER PRODUCTS

- USB2229 5th Generation Hi-Speed USB Flash Media & IrDA Controller with Integrated Card Power FETs in 128 VTQN
 USB2230 5th Generation Hi-Speed USB Flash Media & IrDA Controller with Integrated Card Power FETs in 128 VTQN
 USB2227 4th Generation USB 2.0 Flash Media Card Controller with Integrated Card Power FETs in 128 VTQN
 USB2228 4th Generation USB 2.0 Flash Media Card Controller with Integrated Card Power FETs in 128 VTQN
NEW: USB2240 6th Generation USB 2.0 Ultra Fast Flash Media Controller in 36 GFN
NEW: USB2250 6th Generation USB 2.0 Ultra Fast Flash Media Controller in 128 VTQFP

USB COMBO PRODUCTS

- USB2601 4th Generation USB 2.0 Flash Media Controller with Integrated Card Power FETs and HS Hub in 128 VTQN
 USB2602 4th Generation USB 2.0 Flash Media Controller with Integrated Card Power FETs and HS Hub in 128 VTQN

DISK DRIVE PRODUCTS

- USB2005 USB 2.0 ATA/ATAPI Controller with PD-DRM in 100 STQN
 USB97C202 USB 2.0 ATA/ATAPI Controller in 100 STQN
 USB97CFDC2-01 USB Floppy Disk Controller in 100 STQN

TRANSCIEVER PRODUCTS

- USB3311 Hi-Speed USB Transceiver with 1.8V ULPI Interface - 26MHz Reference Clock in 24 QFNN / 25 VFBN
 USB3315 Hi-Speed USB Transceiver with 1.8V-3.3V ULPI Interface - 24MHz Reference Clock in 24 QFNN
 USB3316 Hi-Speed USB Transceiver with 1.8V ULPI Interface - 19.2MHz Reference Clock in 24 QFNN / 25 VFBN
 USB3317 Hi-Speed USB Transceiver with 1.8V-3.3V ULPI Interface - 26MHz Reference Clock in 24 QFNN / 25 VFBN
 USB3318 Hi-Speed USB Transceiver with 1.8V-3.3V ULPI Interface - 13MHz Reference Clock in 24 QFNN
 USB3319 Hi-Speed USB Transceiver with 1.8V ULPI Interface - 13MHz Reference Clock in 24 QFNN / 25 VFBN
 USB3290 Small Footprint Hi-Speed USB 2.0 Device PHY with UTMI Interface in 40 VFBN
 USB3250 USB 2.0 PHY IC in 56 QFNN
 USB3280 Hi-Speed USB Device PHY with UTMI Interface in 36 QFNN
 USB3300 Hi-Speed USB Host, Device or OTG PHY with ULPI Low Pin Interface in 32 QFNN



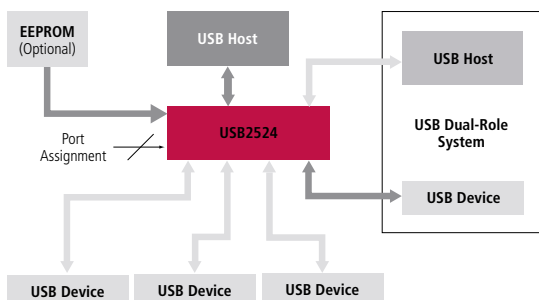
SMSC USB HUB SOLUTIONS

SMSC's USB251x is a family of versatile, cost-effective and power-efficient USB 2.0 hub controllers. Leveraging SMSC's innovative MultiTRAK™ technology that delivers industry-leading data throughput in mixed-speed USB environments, the USB251x family is designed for applications that demand low power and a small footprint without compromising on performance. Well-suited for consumer and mobile applications, all members of the USB251x family are available in space-saving packages. The common 36-pin package shared among all USB251x controllers measures only 6x6mm and provides an ultra small footprint for space-constrained designs while allowing scalable port expansion from two to four ports.

Over 30 programmable features, including SMSC's unique PortMap, PortSwap, TrueSpeed and PHYBoost are designed to aid system designers in simplifying PCB layout and optimizing bill-of-material cost.

USB251x Hub Family						
	USB2512	USB2512i	USB2513	USB2513i	USB2514	USB2514i
# Downstream Ports	2	2	3	3	4	4
MultiTRAK Technology			•	•	•	•
PortMap	•	•	•	•	•	•
PortSwap	•	•	•	•	•	•
TrueSpeed			•	•	•	•
PHYBoost	•	•	•	•	•	•
I2C/SMBus	•	•	•	•	•	•
-40° to 85°C		•		•		•
36QFN (6x6x0.9 mm)	•	•	•	•	•	•
48QFN (7x7x0.85mm)			•	•	•	•
RoHS compliant	•	•	•	•	•	•

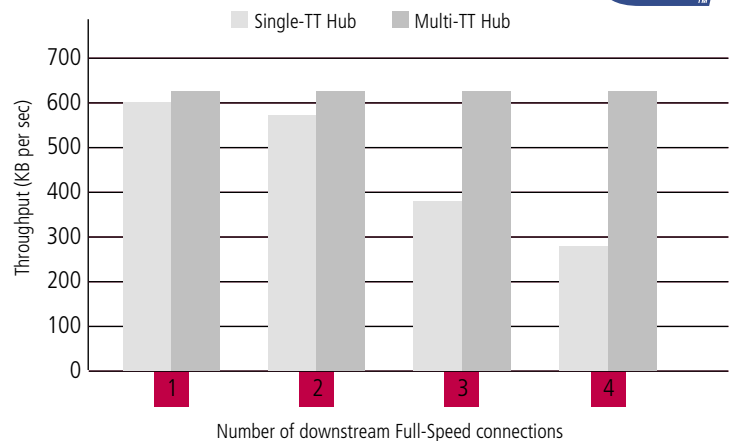
USB MULTISWITCH™ HUB



SMSC MULTITRAK™ TECHNOLOGY

MultiTRAK utilizes a dedicated TT per port to maintain consistent Full-Speed data throughput regardless of the number of active downstream connections. MultiTRAK outperforms conventional USB 2.0 hubs with a single TT in USB Full Speed data transfers by up to 100%*, effectively doubling the amount of data throughput for every downstream port.

*with a minimum of four Full-Speed bulk mass storage devices on a 4-port hub



USB2524 is the industry's first USB switching hub that combines a USB Hi-Speed hub and switching functionality in a single device. Equipped with two upstream ports and four downstream ports, USB2524 enables USB device sharing and switching between two USB hosts without "cable swapping". Requiring no more than standard USB hub driver support, the USB2524 appears as a 4-port USB hub to either USB host system and supports standard USB topology.

- Device Sharing and Switching
- High Throughput
- Minimum Software Overhead
- Ease of Integration



Austria

Avnet Memec

(Avnet EMG Elektronische Bauelemente GmbH)
Diefenbachgasse 35/2 - 3.OG • A-1150 Vienna
Phone +43 1 89199 0 • Fax +43 1 89199 50
vienna@avnet-memec.eu

Belgium

Avnet Memec (Avnet Europe NV/SA)

Maalteccenter Blok G • Derbystraat 299 • B-9051 Gent
Phone +32 9 243 70 70 • Fax +32 9 243 70 79
gent@avnet-memec.eu

Czech Rep, Croatia, Hungary, Serbia, Slovakia, Slovenia

Avnet Memec

(Avnet EMG Elektronische Bauelemente GmbH)
Diefenbachgasse 35/2 - 3.OG • A-1150 Vienna
Phone +43 1 89199 48 • Fax +43 1 89199 51
vienna@avnet-memec.eu

Denmark

Avnet Memec (Avnet Nortec A/S)

Banemarksvej 50 • DK-2605 Brøndby
Phone +45 43 22 80 30 • Fax +45 43 22 80 31
broendby@avnet-memec.eu

Finland

Avnet Memec (Avnet Nortec Oy)

Pihatörmä 1 B • FIN-02240 Espoo
Phone +358 207 499 250 • Fax +358 207 499 255
espoo@avnet-memec.eu

France

Avnet Memec (Avnet EMG France SA)

6/8, rue Ambroise Croizat - ZAE Les Glaises
F-91127 Palaiseau Cedex
Phone +33 1 64 47 90 80 • Fax +33 1 64 47 90 99
paris@avnet-memec.eu

Avnet Memec (Avnet EMG France SA)

33, Rue du Docteur G. Levy
Parc Club du moulin à Vent
Bâtiment 40 • F-69693 Venissieux
Phone +33 4 72 14 84 00 • Fax +33 4 72 14 10 03
lyon@avnet-memec.eu

Avnet Memec (Avnet EMG France SA)

Espace Vilaine - 29, Avenue des Peupliers
F-35510 Cesson Sévigné
Phone +33 2 99 83 60 60 • Fax +33 2 99 83 60 69
rennes@avnet-memec.eu

Avnet Memec (Avnet EMG France SA)

Parc de la Plaine - 35
Avenue Marcel Dassault - BP5867
F-31506 Toulouse Cedex
Phone +33 5 62 47 47 70 • Fax +33 5 62 47 47 66
toulouse@avnet-memec.eu

Germany

Avnet Memec (Avnet EMG GmbH)

Wilhelmstrasse 1 • D-59439 Holzwickede
Tel: +49 2301 919-0 • Fax: +49 2301 919 200
holzwickede@avnet-memec.eu

Avnet Memec (Avnet EMG GmbH)

Villinger Strasse 8 • D-75179 Pforzheim
Tel: +49 7231 168 94-0 • Fax: +49 7231 168 94 68
pforzheim@avnet-memec.eu

Avnet Memec (Avnet EMG GmbH)

Gruber Straße 60c • D-85586 Poing
Tel: +49 8121 775-0 • Fax: +49 8121 775 594
poing@avnet-memec.eu

Avnet Memec Express (Avnet EMG GmbH)

Gruber Straße 60c • D-85586 Poing
Tel: +49 8121 775-190 (West/East)
Tel: +49 8121 775-191 (South)
Tel: +49 8121 775-192 (North)
Fax: +49 8121 775 591
express@avnet-memec.eu

Greece

Avnet Memec

K.Athanatou 4 • GR-16561 Glyfada-Athens
Phone +30 210 9647099 • Fax +30 210 9604409
greece@avnet-memec.eu

Italy

Avnet Memec (Avnet EMG Italy SRL)

Via di Corticella 201 • I-40128 Bologna
Phone +39 051 6380811 • Fax +39 039 2048234
bologna@avnet-memec.eu

Avnet Memec (Avnet EMG Italy SRL)

Via Manzoni, 44 • 20095 Cusano Milanino (MI)
Phone + 39 02 66092 1 • Fax + 39 02 66092 496
milan@avnet-memec.eu

Avnet Memec (Avnet EMG Italy SRL)

Via Alatri 130 • I-00171 Roma
Phone +39 06 25208941 • Fax +39 039 2048234
roma@avnet-memec.eu

Avnet Memec (Avnet EMG Italy SRL)

Piazza Derna 250/12F • I-10154 Torino
Phone +39 011 2050271 • Fax +39 011 2428699
torino@avnet-memec.eu

Avnet Memec (Avnet EMG Italy SRL)

Via Brescia 49 • I-36040 Torri di Quartesolo (Vicenza)
Phone +39 0444 267541 • Fax +39 0444 267532
vicenza@avnet-memec.eu

Netherlands

Avnet Memec (Avnet B.V.)

Takkebijsters 2 • NL-4817BL Breda
Phone +31 76 5722800 • Fax +31 76 5722808
breda@avnet-memec.eu

Norway

Avnet Memec (Avnet Nortec AS)

Ryensvingen 3B • N-0680 Oslo
Phone +47 66 77 97 00 • Fax +47 66 77 97 01
oslo@avnet-memec.eu

Poland, Romania, Bulgaria, Baltic Countries

Avnet Memec (Avnet EM Sp. z oo.)

ul. Knurowska 19 • PL-41-800 Zabrze
Phone +48 32 337 56 20 • Fax +48 32 337 56 20 25
zabrze@avnet-memec.eu

Portugal

Avnet Memec (Avnet Iberia S.A.U.)

Candal Parque • R.28 de Janeiro, 350
P-4400-335 Vila Nova de Gaia
Phone +351 22 377 95 02 • Fax +351 22 377 95 03
porto@avnet-memec.eu

Russia, Ukraine, Belarus

Avnet Memec

Korovinskoye Chausse 10, Building 2, Office 26
RUS-127486 Moscow
Phone +7 495 937 87 08 • Fax +7 495 937 12 63
moscow@avnet-memec.eu

Spain

Avnet Memec (Avnet Iberia S.A.U.)

C/Chile, 10 - ofic. 222 - Edificio Madrid 92
E-28290 Las Matas (Madrid)
Phone +34 91 372 71 19 • Fax +34 91 372 72 13
madrid@avnet-memec.eu

Avnet Memec (Avnet Iberia S.A.U.)

C/Mallorca, 1-23 / ofic. 9a • E-08014 Barcelona
Phone +34 93 228 98 59 • Fax +34 93 425 15 75
barcelona@avnet-memec.eu

Avnet Memec (Avnet Iberia S.A.U.)

C/Duque de Wellington, 8. 1ª - Oficina 31
E-01011 Vitoria
Phone +34 94 5178168 • Fax +34 94 5178218
vitoria@avnet-memec.eu

Sweden

Avnet Memec (Avnet Nortec AB)

Esplanaden 3D • S-172 67 Sundbyberg
Phone +46 8 587 46 300 • Fax +46 8 587 46 301
sundbyberg@avnet-memec.eu

Switzerland

Avnet Memec (Avnet EMG AG)

Gaswerkstr. 32 • CH-4900 Langenthal
Phone +41 62 919 55 55 • Fax +41 62 919 55 00
langenthal@avnet-memec.eu

Avnet Memec (Avnet EMG AG)

Avenue des Boveresses 52 • CH-1010 Lausanne
Phone +41 21 654 01 11 • Fax +41 21 654 01 10
lausanne@avnet-memec.eu

Turkey

Avnet Memec

Bayar Cad. Gülbahar Sok. Nr. 17/132
TR-34742 Kozyatagi/Istanbul
Phone +90 21 63 72 64 72 • Fax +90 21 63 72 66 33
istanbul@avnet-memec.eu

UK & Ireland

Avnet Memec (Avnet EMG Ltd.)

Suite 4, First Floor • Oxford House • Oxford Road
Thame, Oxfordshire OX9 2AH, UK
Phone +44 1844 263600 • Fax +44 1844 263601
thame@avnet-memec.eu