



PBSST

Gigabit Copper Bypass Switch Stand Alone Unit

Product Description

Silicom PBSST is external Bypass switches for Gigabit Copper Ethernet networks. The Silicom Bypass switch protects from network failures and Network maintenance by ensuring network integrity during power loss.

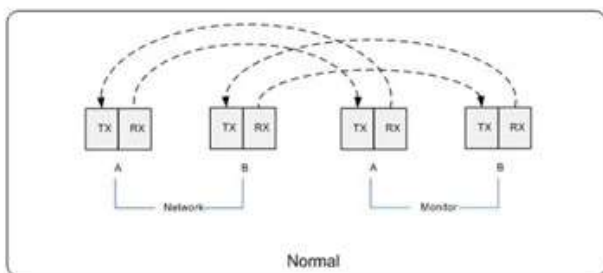
Silicom Bypass switch includes Network ports, Monitor ports and control port. The Network ports are used to connect to Switch / Router Network connections. The Monitor ports are used for an in-line networking device. The control port is used to control the mode of the Bypass switch. On power on, the mode of the Bypass switch is set to Normal, on power lose, the mode of the Bypass switch is set to Bypass



Functional Description

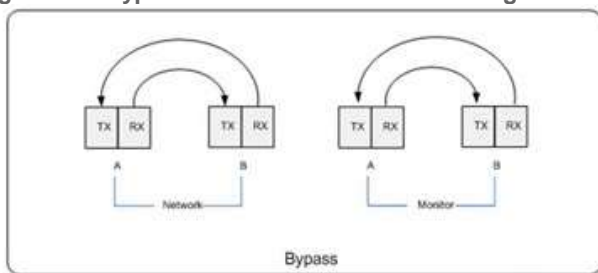
In Normal mode, the Bypass switch diverts the data from the Network ports data to the Monitor ports.

Figure: 1 – Normal Mode Functional Block Diagram



In Bypass mode, the Network data traffic routed directly to the other Network port and the Monitor data traffic routed directly to the other Monitor port

Figure: 2 – Bypass Mode Functional Block Diagram



Key Features

Bypass:

- Bypass Ethernet ports on Power lose
- Reliable Passive solution
- High speed switching
- Low insertions loss
- Throughput not affected and no added delay

Copper Gigabit Ethernet 1000Base-T:

- Supports Gigabit Ethernet (1000Base-T), Fast Ethernet (100Base-Tx) and Ethernet (10Base-T)
- RJ-45 female connectors

Technical Specifications

PBSST: Copper Gigabit Ethernet Technical Specifications – (1000Base-T) Adapters

IEEE Standard / Network topology	Gigabit Ethernet, 1000Base-T Fast Ethernet, 100Base-TX Ethernet, 10Base-T
Data Transfer Rate	1000 Mbit/s, 100 Mbit/s and 10 Mbits/sec in simplex mode per port. 2000Mbit/s 200 and 20 Mbit/s in full duplex mode per port.
Cables and Operating distance	10Base-T Category 3, 4, or 5 maximum 50m * 100Base-Tx Category 5 maximum 50m * 1000Base-T Category 5E maximum 50m * *Theoretical Distance – Defined as half a distance as stated by the IEEE 802.3 standard

PBSST: General Technical Specifications

Size:	x 152mm x 120.5mm x 24mm (6" x 4.75" x 1")
Voltage:	+5V
Weight:	690 gram (24.4 oz)
Power Consumption:	(0.184W) 40mA at 4.6V
Operating Humidity:	0%–90%, non-condensing

Operating Temperature:	0°C – 50°C (32°F – 122°F)
Storage Temperature:	-20°C–65°C (-4°F–149°F)
EMC Certifications:	Class B
MTBF*:	> 50 years
PBSST: LED and Connector Specifications	
LEDs:	(1) LED Blue LED indicating Power /Bypass
Connectors:	(4) Shielded RJ-45 for network data ports (1) RJ45 Control connector – Pin 5 5v, Pin 4 GND, pin 1 and pin 2 are shorted

Order Information

P/N	Description	Notes
PBSST	1 Gigabit Copper Bypass Switch Stand Alone Unit	Supports Gigabit Ethernet (1000Base-T), Fast Ethernet (100Base-Tx) and Ethernet (10Base-T).
RK-1U-3-PBSS	1U Rack Mount Kit for Three PBSS products	

Model P/N /-R

-R: RoHS Compliant / Lead free adapter