

# ASP-M91

## Fiber-optic link port SHARCPAC with JTAG



- Extends link ports to 500m
- Transparent communication
- Up to 32Mbytes/sec
- Bi-directional data transfer
- Transparent JTAG support
- Remote reset
- TRANSPAC compliant
- SHARCPAC compliant

### Overview

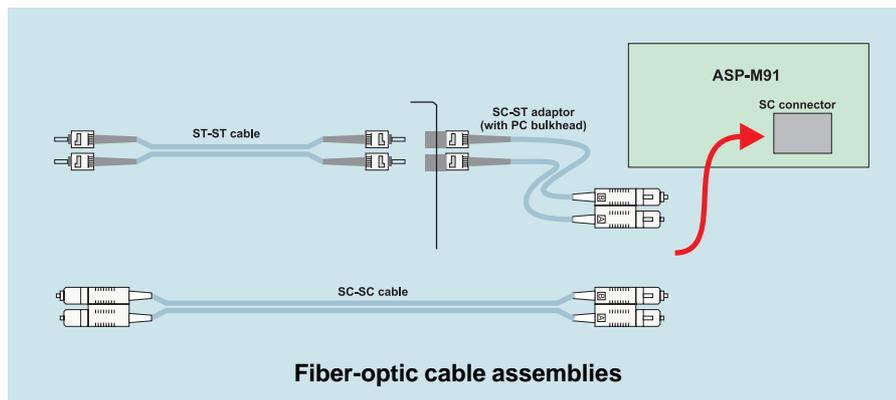
The ASP-M91 is an ADSP-2106x fiber-optic link port extender allowing link ports to be used beyond its normal physical limit and up to 500 m - transparently and at 32Mbytes/sec.

SHARC links offer very high speed communications over local interconnects. As cable lengths go beyond the practical limit for reliable communications for standard SHARC link cabling systems, signal degradation increases the probability that data will be corrupted.

### Fiber-optic Links

The ASP-M91 uses SC connections for the fibre-optic cables. For external connections, the ASP-M91 has optional VME or PC bulkhead mounting kits providing ST external connections. Transtech supplies both SC-SC or ST-ST fibre-optic cables in various lengths up to 500m.

Used as a pair, one device is fitted in a SHARCPAC module site in the local system, with the second in the target system. Power, Link and JTAG signals are drawn from the

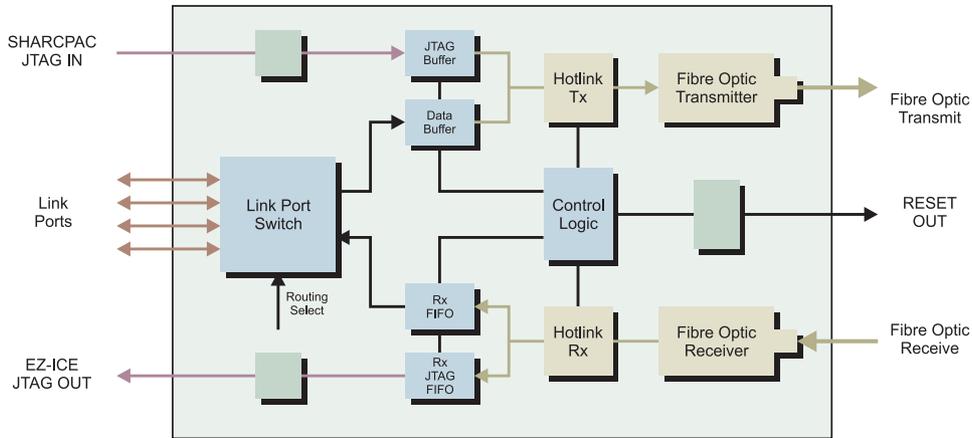


The ASP-M91 solves the link port communications problem elegantly and simple by converting the SHARC link signals onto fibre optic cables, suitable for long distance communication. Because 'target' embedded systems are often located in places which are difficult to access, debugging via JTAG is supported by transparently multiplexing the JTAG signals through the fibre optic interface. Similarly, the RESET signal is also transferred.

SHARCPAC carrier site. Optionally, the interface can be controlled by the SHARCPAC External Bus Interface. This allows one of four link sources to be selected for transmission.



## Block Diagram



## Technical Specification

### Memory

FIFO 256x 32 deep

### Internal Link Ports

None

### External Links Ports

Number 4  
Bandwidth 32Mbytes/sec  
Connector As per SHARCPAC specification

### Fibre-Optic Links Ports

Number 2  
Bandwidth 32Mbytes/sec  
Connector SC pair

### Debug

EZ-ICE 14-way 0.1" IDC header  
(JTAG transparently multiplexed through data cable)

### Misc.

RESETOUT Causes target board to RESET  
(RESET signal multiplexed through data cable)

### Power Requirement

Typical 8.5W

### Software Support

N/A (Appears as link port to external SHARC processors)

## Contact Details

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