



## iWARE® SS7 Module

*Robust Protocol Implementations for the Most Demanding Environments*

### FEATURES

Module includes full MTP1 and MTP2 including FISUs stuffing/elimination, link synchronization, and error stuffing

Multiple formats of SS7 available:

- Traditional narrowband SS7
- Broadband SS7
- Multiprotocol interworkings with SS7

Enables fast and easy integration with a broad range of communications applications, including:

- Softswitches
- Media gateway switches
- Carrier-class switches
- Wireless base stations
- Wireless switching centers
- VoIP servers
- Enterprise switches
- Signal Transfer Points (STPs)
- Service Control Points (SCPs)
- Signal Switching Points (SSPs)

Complete SS7 protocol stacks available using Interphase iWARE SS7 MTP1 & 2 with fully integrated upper layers from:

- Trillium
- Hughes Software Systems

Available in various formats for different operating environments:

- VxWorks®
- Solaris™
- Linux® for Intel environments
- Linux for PowerPC™ environments

Compliant to the following specifications:

- RFC 1661: Point to Point Protocol
- T1.111.3 signaling link, ANSI 1996
- JT Q.703 signaling, TTC 1994
- Q.703 signaling link, NTT
- YD/T 1125-2001

Tested according to YD/T 1195-2002

The Interphase iWARE® Signaling System 7 (SS7) module of the Interphase Software Development Suite (SDS) provides MTP1 and MTP2 layers to enable numerous applications in numerous environments including wireless, converged Next Generation Networks (NGNs) (i.e. softswitches, media gateways), as well as traditional Advanced Intelligent Network (AIN) systems such as Signal Transfer Points (STPs), Service Control Points (SCPs), and Service Switching Points (SSPs).

Fully interoperable with other Interphase protocol modules and conforming to industry standards, the iWARE SS7 module can be executed to run multi-channel SS7 connections from the controller's on-board processor. This module of the Interphase SDS provides the embedded firmware, sample programs, and extensive documentation to enable easy integration into any application environment.

Interphase also offers complete, fully-integrated SS7 stacks with third party upper layers.

SS7 upper layers are available from Hughes Software Systems and Trillium, whose offerings are interoperable with the MTP1 & MTP2 layers provided by Interphase. Various formats of SS7 are now available including traditional narrowband SS7, broadband SS7, and multiprotocol interworkings using SS7.

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[interphase.com](http://interphase.com)  
1.800.FASTNET

# iWARE SS7 Module

Powerful Features for Next-Generation Connectivity

## iWARE Software Development Suite Contents

The module runs with the iWARE Software Development Suite, which includes:

- Embedded Firmware (Executed by the on-board PowerQUICC processor)
- Base Drivers for each supported operating system (executed by the host processor)
- Configuration and diagnostic utilities
- Sample programs
- Extensive documentation for each component of the suite

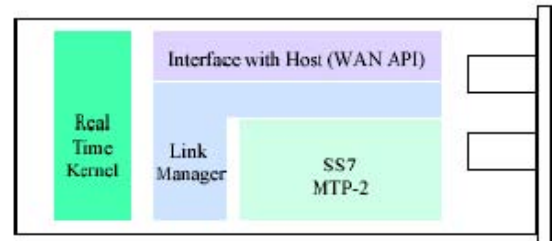
For a detailed description of the suite contents, refer to the main iWARE Software Development Suite datasheet.

## Complete SS7 Stacks

Interphase provides the lower layers of the SS7 stack, namely MTP1 & MTP2, for use with various Interphase T1/E1/J1 solutions. A complete SS7 stack is available with use of the SS7 lower layers from Interphase and upper layers from third party vendors, such as Trillium and Hughes Software Systems. Interphase designs its lower layers to interoperate with these upper layers, and in many cases, convergence layer software is available. Interphase also offers a broad set of professional services for integration and customization of various software packages.

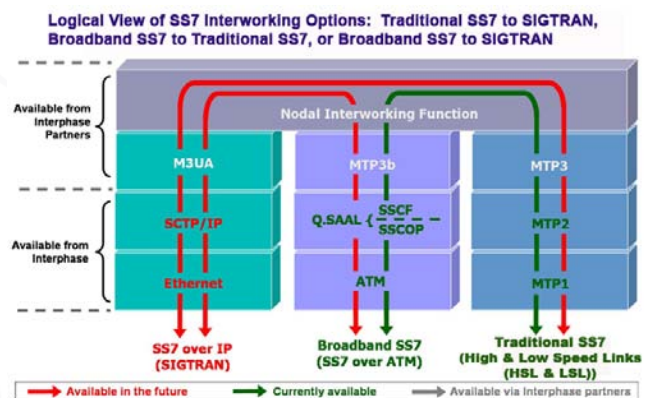
## SS7 Firmware

The Interphase iWARE API SS7 MTP2 layer is a firmware protocol layer and a driver module that implements the MTP Physical and Data Link functions. On each channel (DS0), the embedded firmware executes a full implementation of MTP2, including FISUs stuffing/elimination, link synchronization, and error management. MSUs and OAM services are relayed to layer 3 MTP-3 assumed to be running on the host. The SS7 embedded firmware supports up to approximately 100 simultaneous MTP2 sessions.



## Multiple SS7 Options

- Traditional narrowband SS7 (Low Speed Links (LSL))
- Broadband SS7 (High Speed Links (HSL)/SS7 over ATM) requiring:
  - Broadband SS7 ATM layer
  - Broadband SS7 Q.SAAL layer
- Narrowband SS7 to broadband SS7 interworking
- Future: Narrowband SS7 to SIGTRAN (SS7 over IP over Ethernet) interworking
- Future: Broadband SS7 to SIGTRAN (SS7 over IP over Ethernet) interworking





## iWARE SS7 Module

### Configuration Options

		4538	4539	4539F	5539F
Solaris	SS7-LS		■ (902)	■ (904)	■ (902)
	SS7-HS		■ (902)	■ (904)	■ (902)
	Q.SAAL		■ (902)	■ (904)	■ (902)
Linux Intel	SS7-LS	■ (908)	■ (906)	■ (903)	■ (907)
	SS7-HS	■ (908)	■ (906)	■ (903)	■ (907)
	Q.SAAL	■ (908)	■ (906)	■ (903)	■ (907)
Linux PowerPC (907)	SS7-LS	■ (908)	■ (907)	■ (902)	■ (906)
	SS7-HS	■ (908)	■ (907)	■ (902)	■ (906)
	Q.SAAL	■ (908)	■ (907)	■ (902)	■ (906)

#### Notes:

Solaris = Solaris OS (902 = *part 1* of order number\*)

Linux Intel = Linux OS on an Intel processor (906 = *part 1* of order number\*)

Linux PowerPC = Linux OS on a PowerPC processor (907 = *part 1* of order number\*)

SS7-LS = SS7 MTP1&2 Low Speed Links (SS70-LF = *part 2* of order number\*)

SS7-HS = SS7 MTP1&2 High Speed Links (SS7H-LF = *part 2* of order number\*)

Q.SAAL = Q.SAAL (SSCOP/SSCF) (QSAL-LF = *part 2* of order number\*)

\*Order Number = Card Number-*part 1*-*part 2*.

For example, the order number for Solaris software for SS7 MPT1&2 High Speed links on a 4539 card = 4539-902-SS7H-LF

Additional packages may be under development. Please contact your Interphase representative if you do not see the package you need.

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