Tellabs™ 1000 Multiservice Access Platform (MSAP) Inverse Multiplexing for ATM (IMA) Plug-in Card

Overview

The Inverse Multiplexing for ATM (IMA) plug-in card provides native end-to-end ATM capability over copper transport by multiplexing ATM cells across multiple circuits. This enables ATM QoS and greater than 1.5 Mbps services from copper-fed remotes. The IMA plug-in card treats multiple T-1 lines as a single ATM channel, known as an IMA group. The IMA card can be an uplink to an ATM network as a service drop to a customer, or as an interterminal data connection between Tellabs™ 1000 MSAP terminals.

Providing up to 12 Mbps of guaranteed services over copper-fed remote terminals, the IMA plug-in card logically groups physical layer technologies such as T-1, HDSL and HDSL2, making it capable of delivering greater bandwidth and guaranteed Service Level Agreements (SLAs) over almost any copper facility.

The integrated IMA is a cost-effective complement to all copper-fed systems currently deployed or to new greenfield systems where xDSL services are planned. The IMA plug-in card supports up to eight T-1 or T-1Hd links. One IMA plug-in card supports up to four groups and can be configured as:

- One IMA group of two to eight T-1 links
- Two IMA groups, each group requiring at least two T-1s, with the total T-1s not exceeding eight
- Three IMA groups, each group requiring at least two T-1s, with the total T-1s not exceeding eight
- Four IMA groups, with two T-1s each

The IMA plug-in card supports the following line cards as IMA links:

- T-1/T-1X
- T-1HD (Adtran)
- T-1HD (ADC)
- T-1HD2 (Adtran)

Features and Benefits

- Supports up to four IMA groups and eight T-1 lines
- Each group is provisionable as ATM uplink or ATM service
- Supports up to 255 VCCs
- When a T-1 card is used as an IMA link and provisioned within an IMA “ATM Uplink” group, it can provide the terminal reference timing clock
- Supports LET aggregation of data traffic at the edge of your network
LEDs on the faceplate of the IMA card indicate the following conditions:

- Red FAIL — plug-in card failure, CPU failure, or in power-up diagnostics
- Blinking Yellow ACTV/STBY — In pump-up mode
- Nonblinking Yellow ACTV/STBY — plug-in card is provisioned and is in standby mode
- Green ACTV/STBY — plug-in card is active, and at least one IMA group can pass ATM traffic
- Green GRP 1 to GRP 4 — active
- Red GRP 1 to GRP 4 — inactive

Specifications

Environmental

- Operating temperature: -40° F to +149° F
  (-40° C to +65° C)
- Relative humidity: 5%-95%, noncondensing
- Maximum power consumption: 10 W

Dimensions

- Height: 5.125 in (13.018 cm)
- Width: 0.563 in (1.429 cm)
- Depth: 10.5 in (26.67 cm)
- Weight: 0.5 lb (0.30 kg)

Compliance

- ATM Forum Inverse Multiplexing for ATM
  Specification Version 1.1, Appendix D
  (Reference 41)
- UNI.3.1 specification Appendix C

Take the next step. Contact Tellabs today.