



SKU: 0101-0025

Category: Cards/Units

## Central Processing Unit 3 (CPU-3)

The Central Processing Unit 3 (CPU-3) plug-in card enables end-to-end system control of the Tellabs 1000 Multi-Service Access Platform from the primary shelf at both the LET and RST nodes. The card supports both ATM, Ethernet and TDM connections while performing system initialization, provisioning, alarm reporting, maintenance, diagnostics, and fault detection for the Tellabs 1000 MSAP system.

## Features

- Alarm generation and prioritization
- System maintenance and administration
- Non-volatile provisioning data storage
- Diagnostics and fault localization
- Timing source selection and synchronization
- Order wire and buzzer
- Dual-memory support for non-service affecting upgrade
- Supports both ATM, Ethernet and TDM transmission or services

## Highlights

### Precise Timing

The CPU-3 selects timing sources, synchronizes to external timing sources, and provides a high-stability internal timing reference. The CPU-3 card meets SONET minimum clock requirements for holdover and free-run accuracy.

### High Reliability

Install a minimum of one CPU-3 plug-in card in the primary shelf at the LET and at each RST. For redundancy, install an additional CPU-3 card at each terminal. For interconnections to expansion shelves, the CPU-3 card supports ELU/EBC and ELU-3/EBC-3 spans simultaneously.

### Easy Management

The CPU-3 plug-in card contains the menu-driven Tellabs 1000 Craft Interface software. Connect to the Craft Interface with a simple terminal, such as a VT100, to perform system administration, maintenance, testing, and provisioning. Access the Craft Interface using the standard RS-232 port located on the air ramp portion of the CBA, through wire-wrap backplane pins, or through a LAN connection using the IPMI plug-in card.

### Connection Admission Control Functions

The CPU-3 card hosts the systems Connection Admission Control (CAC function). CAC initiates, maintains, and tears down virtual channel connections set up by the user. The CPU-3 manages bandwidth and controls allocation of VPI/VCI resources.

### Call Control

The CPU-3 plug-in card controls call processing for the Tellabs 1000 system. It allocates timeslots for subscribers who have gone off-hook, cancels time slots for terminated calls, relays provisioning information to and from subscriber interfaces, and provides automatic concentration during span failures.

## Specifications

### Physical

- 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 (0.23 kg)

### Power Consumption

- Maximum power consumption: 10 W
- Typical power consumption: 5.0 W

### Alarm / Monitor / Test

- Alarm generation and prioritization

### Environmentalals

- Temperature: -40° to +149° F (-40° to +65° C)
- Relative Humidity: 5-95% noncondensing
- Altitude: Up to 10,000 feet

### Compliance

- Jitter tolerance: T-1/E-1 1.2/88-OMR, ANSI
- Office composite clock: TA-TSY-000378 Telcordia
- Synchronization: TA-NPL-000436 Telcordia

### General

- CPU Microprocessor: Motorola MPC860SAR
- CPU Program and provisioning data store: Flash EPROM (8MB)
- CPU RAM store: SDRAM (16MB)
- Clock source: Slot selectable (any service slot), external 64-kbps clock and external 2.048-MHz BITS clock
- Internal clock initial accuracy (freerun): 3 1ppm @ 25° C (77° F)
- Internal clock stability (holdover): 3 2 ppm (over operating temperature)
- Internal clock Aging: 3 4 ppm (10 yrs)

### LED Indicators

- FAIL (red)
- ACTV (green)
- SYNC (green)
- NEAR END and FAR END (amber)
- CRITICAL, MAJOR and MINOR (red)
- ACO (amber)

### Management

- Craft User Interface (CUI)
- Tellabs Panorama Element Management System (EMS)

### Software Support

- Minimum base software FP16 and higher

### **Installations**

- Supported in Tellabs 1000 CBA

### **Ordering Information**

- CPU-3: 0101-0025