# PASSPOINT™

MLB
Main Logic Board

The Main Logic Board (MLB)

The Main Logic Board or "MLB" is the main controller of the Access Control System. It contains the card database, event log, and system configuration information. It also keeps track of the system status. The card data base, configuration information, and event log are stored in FLASH memory. The number of cards recognized by the system and the number of events stored in the event log can be expanded using larger Flash Memory Devices. MLB contains a Real Time Clock which is used to measure events, validate schedules, and create time-stamps. MLB provides two protection zones and one output relay.
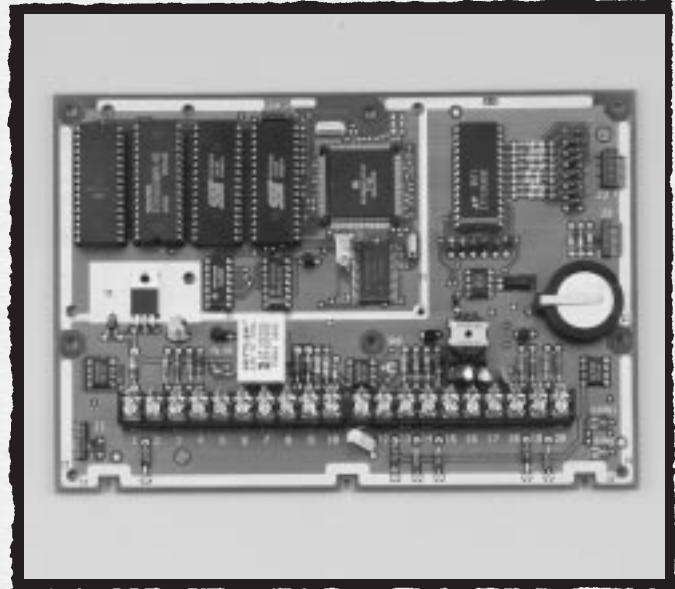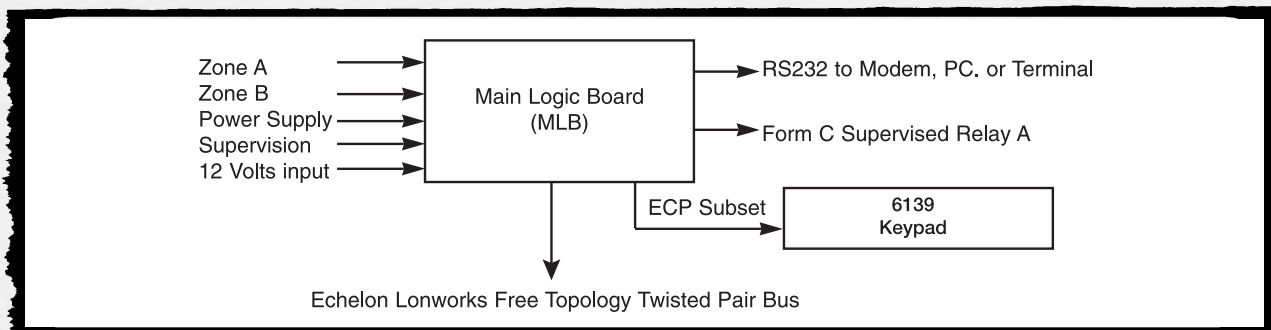
ADEMCO Access Control System, MLB Main Logic Board.

Key Features:

- 32 bit microprocessor.
- Up to 1 MByte of Flash memory for options, cards and events.
- Up to 512 KBytes Flash memory for program storage.
- Up to 512 KBytes of RAM for temporary data storage.
- Battery Backed Real-Time Clock. The real time clock battery is a 3 volt, 75mA-hour lithium battery. The battery is replaceable and has a typical life of at least 5 years.
- Echelon Neuron Network interface implemented with an Echelon transceiver.
- 6139 keypad interface

- 2 three state (Open/Short/Eolr) protection zones.
- 1 Form C Supervised Relay, rated at 5A resistive load @ 28VDC/125VAC. The supervision input indicates voltage is present if the common point of relay has greater than 8.5VDC. The relay is accompanied by an LED which is illuminated when the relay is energized.
- One fully functional RS232 Port.
- Two status LED's
- Power supply monitor inputs for AC loss and low battery detection.
- All terminal blocks accept push-on terminal strips.

MLB
Main Logic Board

Zone A
Zone B
Power Supply
Supervision
12 Volts input

Main Logic Board
(MLB)

RS232 to Modem, PC. or Terminal

Form C Supervised Relay A

ECP Subset

6139
Keypad

Echelon Lonworks Free Topology Twisted Pair Bus

APPLICATIONS:

The MLB provides one RS232 Serial Port. This port can connect to a modem or a PC running PassPoint's front end software package.

INSTALLATION:

The MLB communicates with its peripherals via a twisted pair network connection. Physically, this connection adheres to Echelon Free-Topology Transceiver specifications (FTT-10). This communication transceiver uses a transformer-coupled interface (for electrical isolation) and polarity insensitive differential-pair (for common noise rejection); electrical design operating at 78Kbps up to distances of 500 meters (free topology); or 2700 meters (doubly terminated bus). Star, bus, and loop wiring are all supported by this architecture. Logically, the connection is made through the use of the Echelon Lonworks Protocol. The use of Lonworks is becoming a very popular communications protocol throughout the building automation market. This connection supports communications with up to 126 peripheral modules (not including the MLB). Each module connected to the network is identified by a unique 48-bit serial number which is present in each module's Neuron chip. Echelon Lonworks acts as

the delivery system for messages within the Access Control System. The MLB supports all of the system peripheral modules communications requirements.

SPECIFICATIONS:

The MLB obtains its power from the LOCAL power output connection of its associated Access Control System Power Supply. The MLB requires 10.5-14V DC@250mA. It provides two power supply monitoring inputs: low battery and AC loss. These two inputs are compatible with the corresponding monitoring outputs of the Access Control System Power Supply.

Ordering Information:

Part No.	Description
PTMLB	Main Logic Board

AC Supervision
Battery Supervision
+14VDC
Ground

NOTE: USE UL LISTED ENERGY CABLE FOR ALL CONNECTIONS.

MLB

J2

RS232
Cable
To System
Interface

J1

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Logic Power In
Ground
AC Supervision
Battery Supervision
Ground
Output Relay N/C
Output Relay Common
Output Relay N/O
Relay Supervision
Ground
+12VDC (RED)
Ground (BLK)
Data In (GRN)
Datta Out (YEL)
Ground
Zone 1
Ground
Zone 2

Keypad
Connections

2000
OHMS
EOLR

2000
OHMS
EOLR

To DCM 1

To DCM 2

ADEMCO GROUP
COMMERCIAL SYSTEMS DIVISION