ADVANCED
LINEAR
DEVICES, INC.

MB1S/MB201/MB203 BOARD LEVEL PRODUCTS with ALD500/ALD500R/ALD521D/ALD523D DVM CHIPSET

General Description

The MB1S, MB201 and MB203 are functional DVM printed circuit boards consisting of ALD500/ALD500R and ALD521D/ALD523D DVM chipset with associated support circuitry. These boards can be used for production as well as engineering evaluation purposes.

MB1S supports Mode A operation;
MB201 supports Mode A and Mode B operation; and
MB203 supports Mode A, Mode B and Mode C operations. In addition, the MB203 also drives and manages a 2 x 16 LCD or VFD Character Display Module.

The three optional Mode versions, each populated with different components and configuration, are:

Mode A version- calibrated reference mode.
Mode A is used primarily for measurements against a calibrated reference voltage typically required in precision voltmeter applications.

Mode B version – ratio-metric mode.
Mode B is intended for measurements against a ratio-metric reference voltage such as those required in weigh scale applications.

Mode C version- display only mode.
Mode C is used for display applications and can be programmed to be compatible with most industry standard serial binary input data formats — up to 31 serial bits plus sign bit.

Each of the MB1S, MB201and MB203A boards has provision for PC interface (DB25), included DOS setup, operating and calibration software, Basic programming interface modules, and input resistor divider network for input scaling. DC Inputs are single ended or optionally fully differential, and features automatic zero and automatic input polarity detection. For MB201 and MB203, there are also optional socket/footprints for input pre-amplifier and 2-input differential input analog switch.

The MB203LCD consists of a 2 line x 16 Character Display Module with cable and connector intended for use in conjunction with MB203A. The MB203A and the MB203LCD together provides a stand-alone functional DVM module with display, and can be used as an independent, stand-alone Digital Panel Meter. The user only needs to provide a suitable analog input voltage, a +5 VDC power supply, and an optional PC connection.