

## TECHNICAL BRIEF

BY: AZD ENGINEERING

### TFT Digital Board Signals

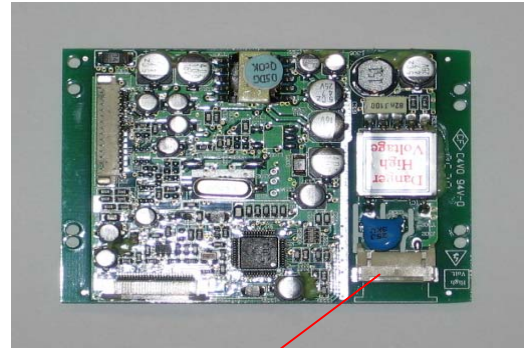
AZ Displays offers decoder boards suitable to display full motion video on its digital TFT panels. Digital displays are designed to interface to a digital-to-analog board via TTL (transistor to transistor logic) or LVDS (low voltage differential signal).

### TTL Interface

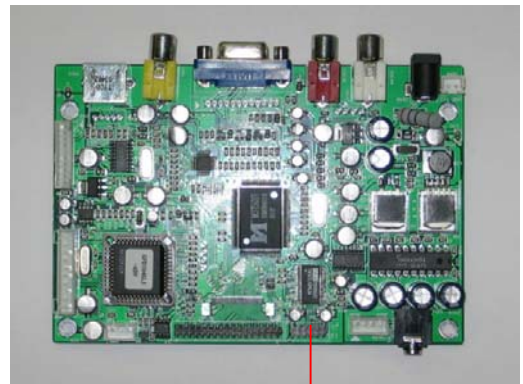
The TTL signal is transmitted in parallel(multiple signal data lines) and measured against a common signal ground. This standard method of 5V logic for transferring data (binary 1 or 0) from the board to the panel can only be used for distances up to 18 inches..

### LVDS Interface

LVDS signaling uses a serial form of communication between the board and panel. By operating at a higher clock frequency, LVDS connections contain fewer wires and signal data lines. In addition to this technology, it uses 2 wires per signal with a positive and negative voltage difference. This type of construction reduces noise and dampens interference since the current flows in opposite directions in each of the 2-wire signals. Not only does LVDS provides high speed data transfer, it can be used for longer distances up to 10 meters and higher resolutions are supported.



30-pin TTL Output header



12-pin LVDS Output header

### New Releases

AZ Displays new digital-to-analog decoder board for our unique 5" digital TFT display of VGA resolution PD050VX2 uses TTL interface. This decoder board p/n SFD064VX1-ADV/VGA/INVT allows users to display video content on PD050VX2 in portrait or landscape modes.