Connecting the Loral 1350 Camera to the DT3152-LS Board

The Loral 1350 camera requires three power sources: +15 V, -15 V, and +5 V. Two 15-pin, D-shell connectors are required for the clock and sync signals. In addition, either a standard EP306 input cable from Data Translation or another female, 15-pin, D-shell connector is required to connect the analog video signal from the camera to the J1 connector on the DT3152-LS board.

The integration period is set by the period of the LINE_OUT signal. The recommended minimum LINE_OUT pulse width is 5 MCLK cycles; the minimum period is 1048 MCLK cycles.

The DT3152-LS requires a single-channel video output from the camera (model number ends with a 1). Valid video begins at pixel 23 of each line as measured from the rising edge of the LINE_IN signal. The connections between the camera and the DT3152-LS should be implemented as twisted pairs.

The following diagram outlines the necessary cable connections when connecting the Loral 1350 line-scan camera to the DT3152-LS board.