LOW VOLTAGE / LOW POWER DIFFERENTIAL INTERFACE

• THE ATTACHED DOCUMENT WAS DEVELOPED UNDER TIA FOR A LOW VOLTAGE “POINT TO POINT” APPLICATION

• WITH MODIFICATIONS PROPOSED BY UNITRODE THIS TECHNOLOGY CAN BE READILY ADAPTED TO A MULTIDROP, BIDIRECTIONAL APPLICATION

• WHEN COMBINED WITH APPROPRIATE GROUND AND ASSERTION DRIVERS FOR SINGLE ENDED A TRULY UNIVERSAL SCSI PORT TRANSCEIVER CAN RESULT
LOW VOLTAGE / LOW POWER DIFFERENTIAL INTERFACE

“UNIVERSAL” SIGNAL DRIVER ARCHITECTURE

3.3 VOLTS

DF PULL UP DRIVER

DF PULL DOWN / SE GROUND DRIVER

SE GROUND DRIVER

DF PULL UP DRIVER / SE NEGATION DRIVER

DF PULL DOWN / SE ASSERTION DRIVER

SE ASSERTION DRIVER

GROUND

SINGLE ENDED: GND - SIGNAL

DIFFERENTIAL: + SIGNAL - SIGNAL

NOTE: BALANCED FORM, REUSE OF 3 DF DRIVERS FOR SE, COMMON MODE LEVELS SUPPORTED FOR DF

BILL HAM  DIGITAL EQUIPMENT  SPI-2 WORKING GROUP JULY 10, 1995