

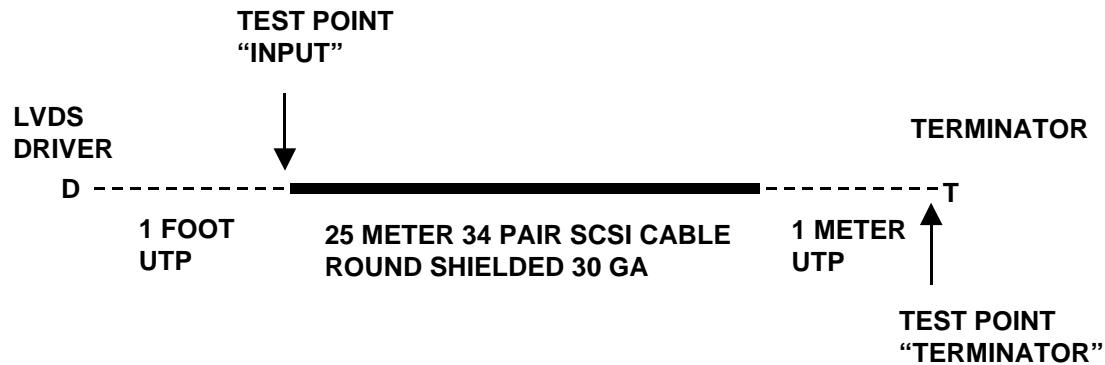
FAST 40 / 80 LVDS PERFORMANCE USING SCSI INTERCONNECT

- **THE FOLLOWING SLIDES SHOW SOME PRELIMINARY DATA USING THE LVDS DISCRETE DRIVERS SUPPLIED BY TI WITH STANDARD SCSI INTERCONNECT AND PASSIVE TERMINATION**
- **IN THE INTEREST OF OBTAINING EARLY BOUNDING OF THE LIKELY CONFIGURATION RULES, LABORATORY EXPEDIENCY WAS USED -- SOME OF THE FEATURES ARE NOT IDEAL BUT A REASONABLE APPROXIMATION TO AN ACTUAL IMPLEMENTATION DOES EXIST**
- **THE POINT TO POINT APPLICATIONS APPEAR CAPABLE OF OPERATING WELL PAST FAST 100 AT 25 TO 30 METERS**
- **THE MULTIDROP APPLICATIONS ARE SEVERELY AFFECTED BY INTERSYMBOL INTERFERENCE AND WILL REQUIRE SOME MODEST LENGTH REDUCTIONS (GUESS TO AROUND 15 TO 20 METERS)**

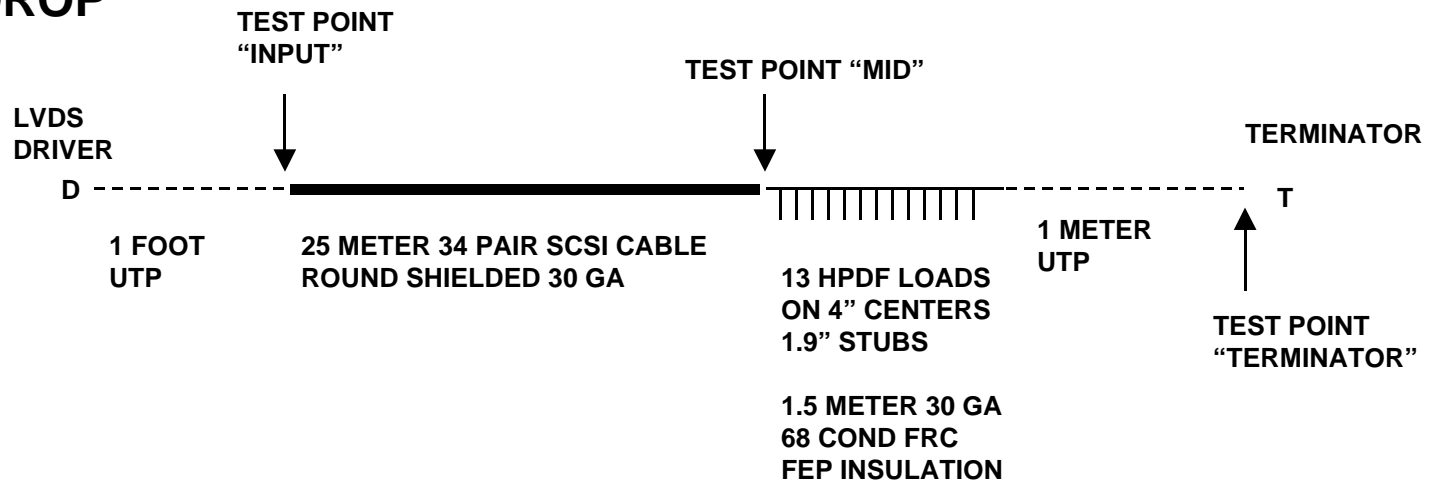
FAST 40 / 80 LVDS PERFORMANCE USING SCSI INTERCONNECT

TEST SETUPS

POINT TO POINT

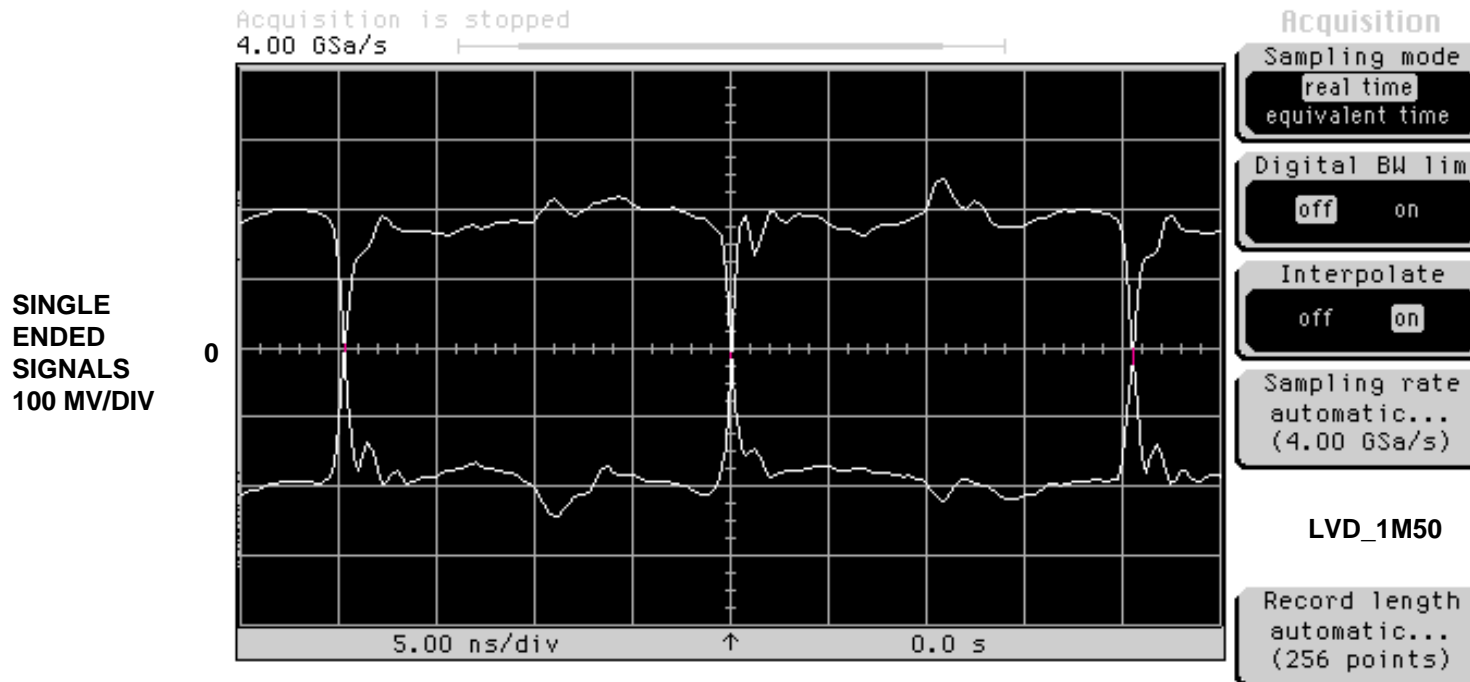


MULTIDROP



FAST 40 / 80 LVDS PERFORMANCE USING SCSI INTERCONNECT

POINT TO POINT

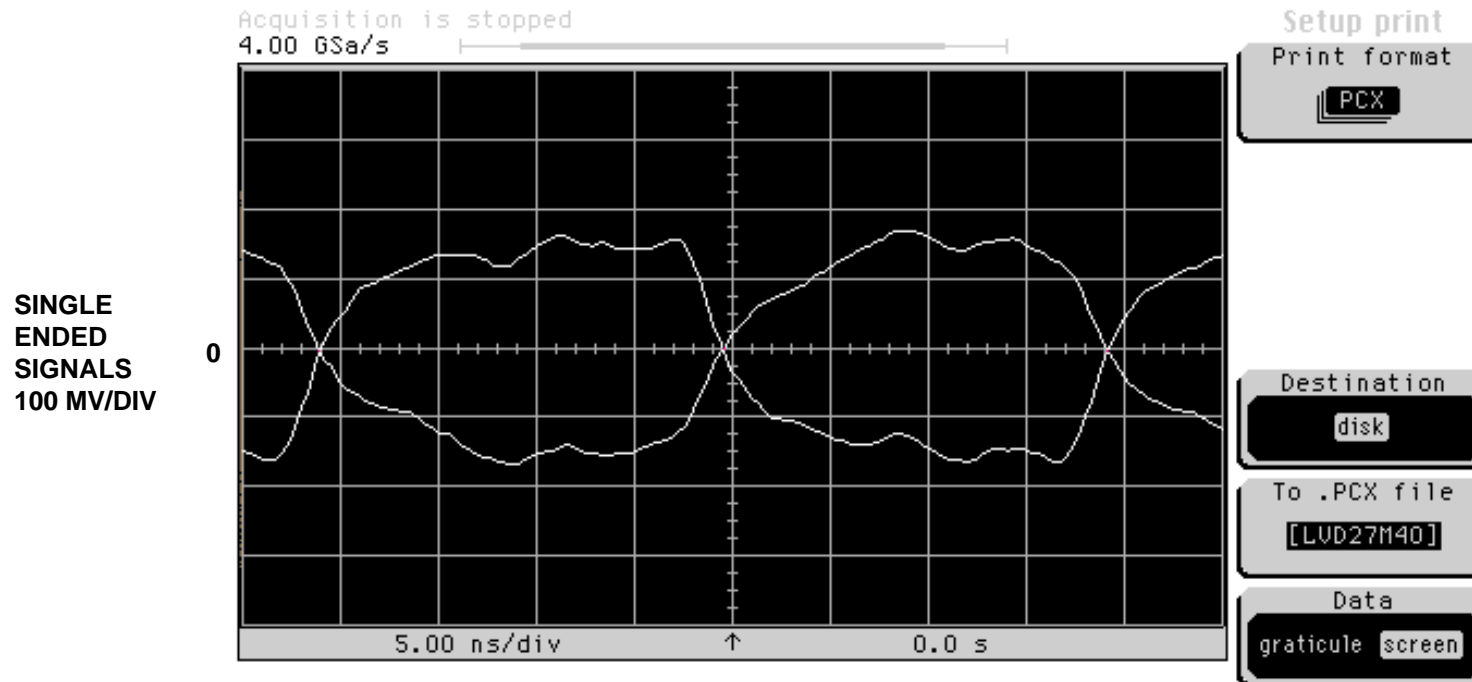


OFFSET BOTH CHANNELS 1.2V

1 METER UTP AT 25 MHZ

FAST 40 / 80 LVDS PERFORMANCE USING SCSI INTERCONNECT

POINT TO POINT



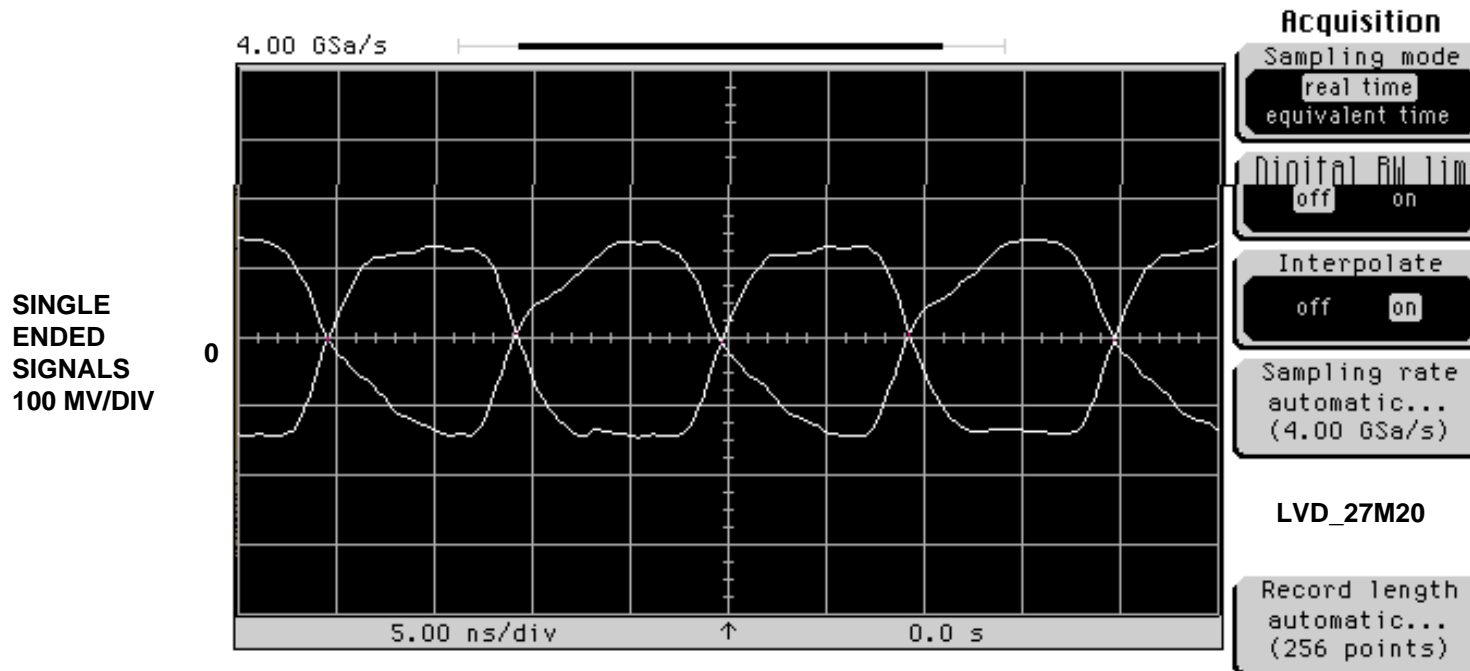
OFFSET BOTH CHANNELS 1.2V

27 METER AT 25 MHZ

LVD_27M40

FAST 40 / 80 LVDS PERFORMANCE USING SCSI INTERCONNECT

POINT TO POINT

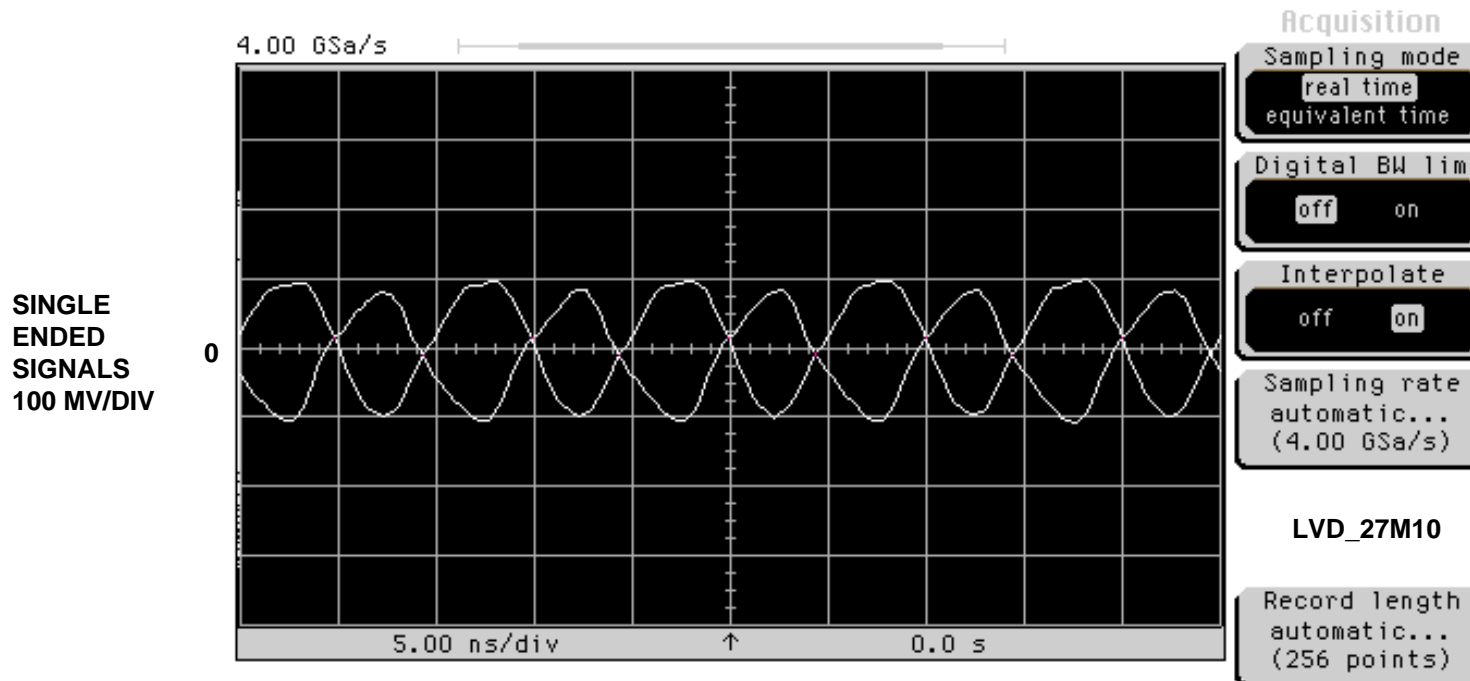


OFFSET BOTH CHANNELS 1.2V

27 METER AT 50 MHZ

FAST 40 / 80 LVDS PERFORMANCE USING SCSI INTERCONNECT

POINT TO POINT

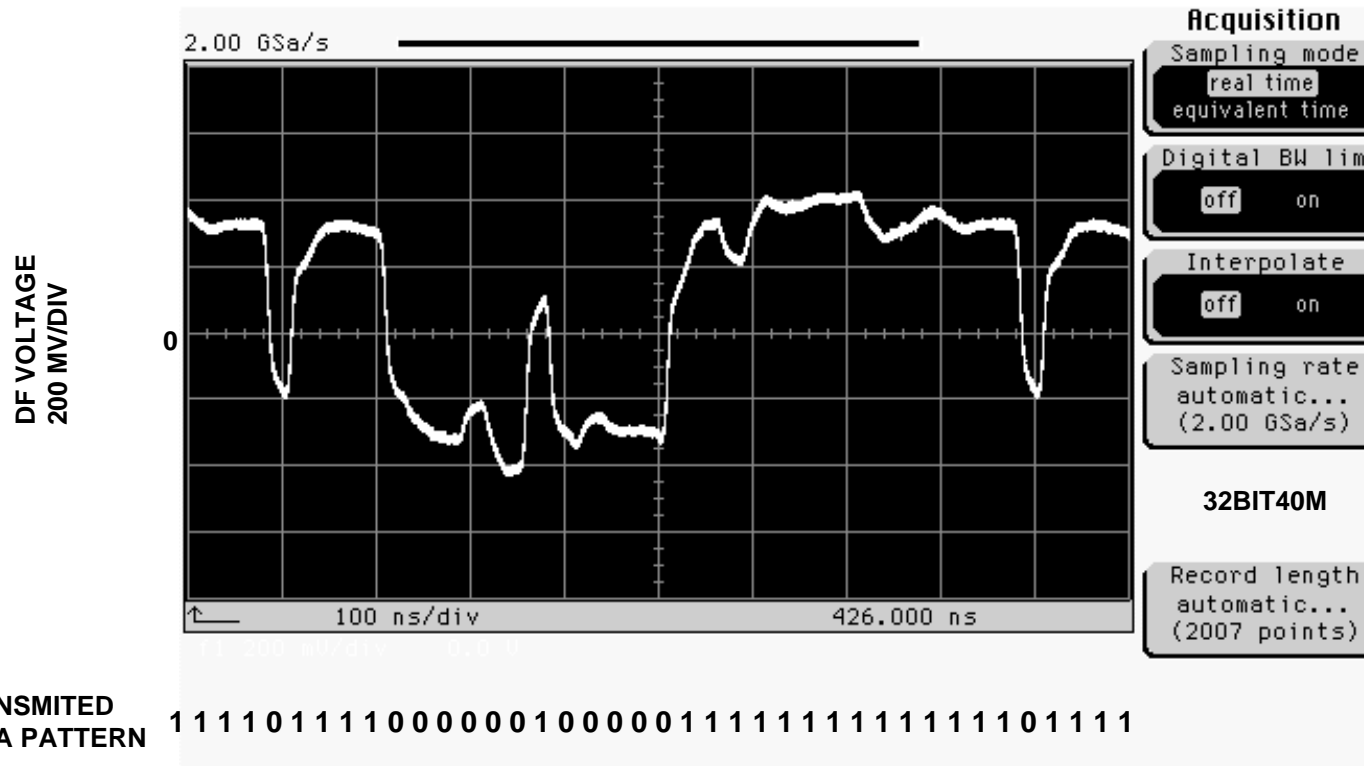


OFFSET BOTH CHANNELS 1.2V

27 METER AT 100 MHZ

FAST 40 / 80 LVDS PERFORMANCE USING SCSI INTERCONNECT MULTIDROP

DIFFERENTIAL SIGNAL AT FAR TERMINATOR (NEAR LUMPED LOADS)



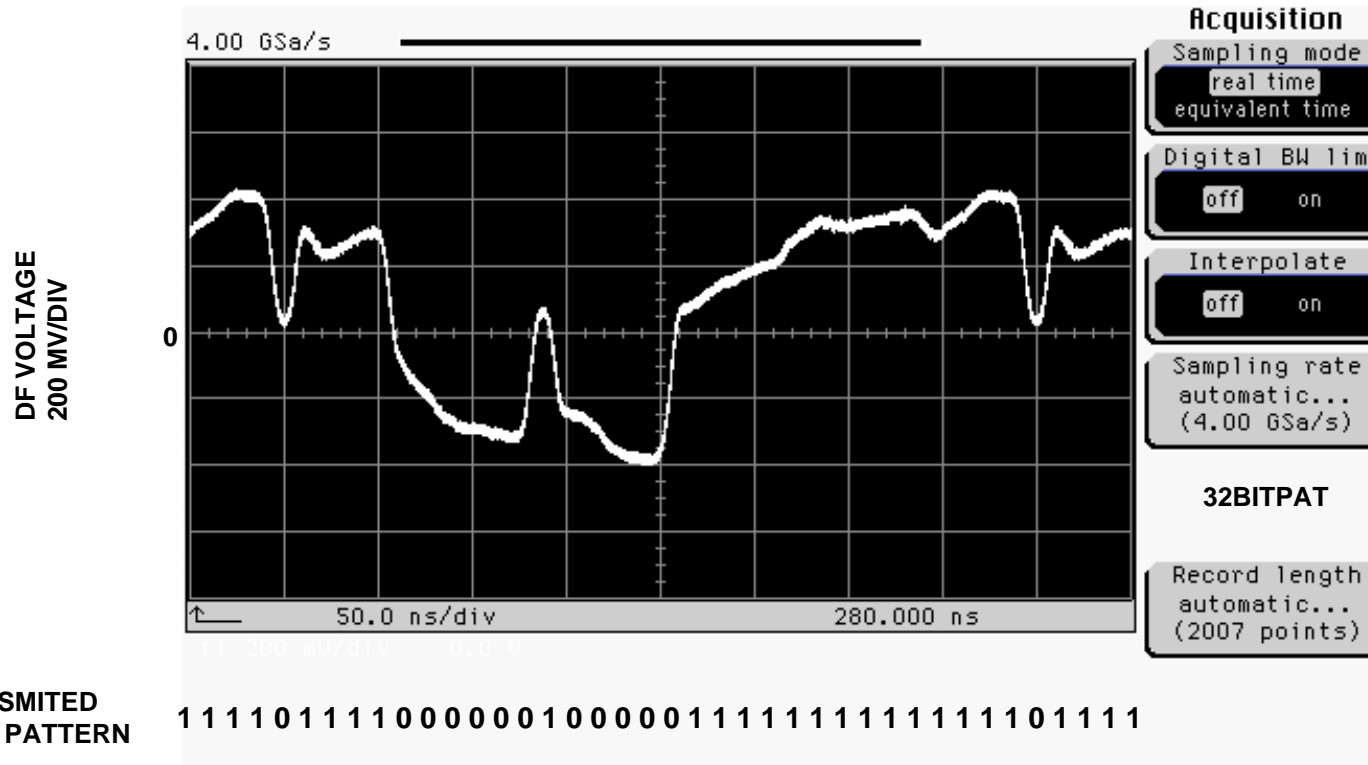
FAST 40 LVDS AT 27 METERS WITH 13 LOADS LUMPED NEAR ONE END

ALL BITS ACCURATELY DETECTED BUT SIGNIFICANT MARGIN REDUCTION
IS EVIDENT FOR ISOLATED BITS

FAST 40 / 80 LVDS PERFORMANCE USING SCSI INTERCONNECT

MULTIDROP

DIFFERENTIAL SIGNAL AT FAR TERMINATOR (NEAR LUMPED LOADS)

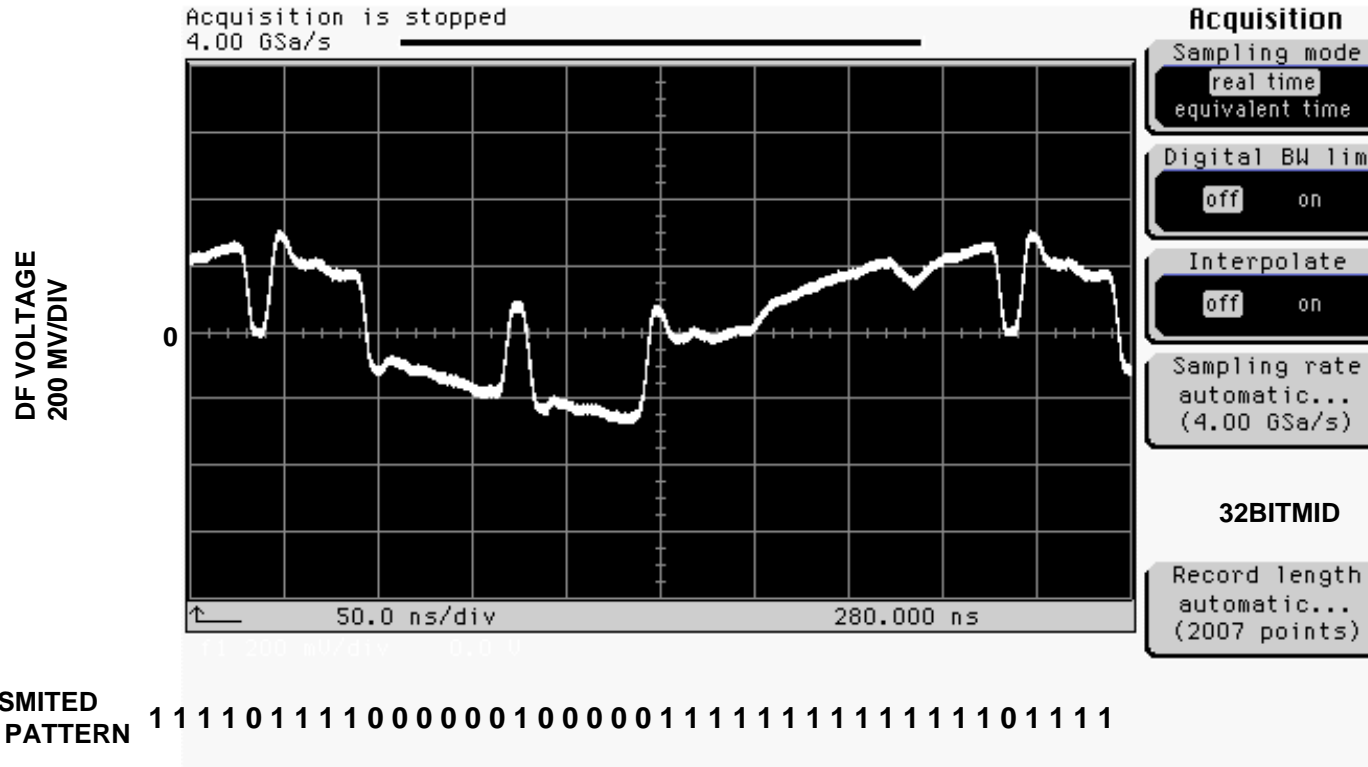


FAST 80 LVDS AT 27 METERS WITH 13 LOADS LUMPED NEAR ONE END

ISOLATED BITS HAVE LOST SO MUCH AMPLITUDE THAT DETECTION IS UNLIKELY

FAST 40 / 80 LVDS PERFORMANCE USING SCSI INTERCONNECT MULTIDROP

DIFFERENTIAL SIGNAL AT BEGINNING OF LUMPED LOADS)



FAST 80 LVDS AT 27 METERS WITH 13 LOADS LUMPED NEAR ONE END

ISOLATED BITS HAVE LOST SO MUCH AMPLITUDE THAT DETECTION IS UNLIKELY
NOTE ALSO PROBLEM WITH 1'S AFTER SEVERAL 0'S AND 0'S AFTER SEVERAL 1'S