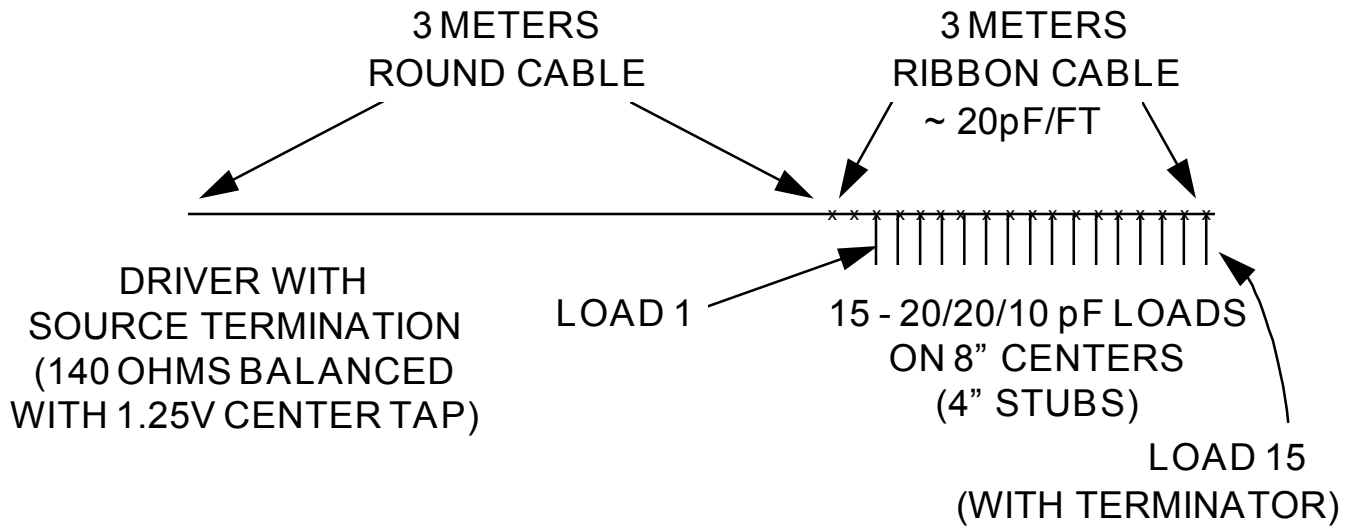


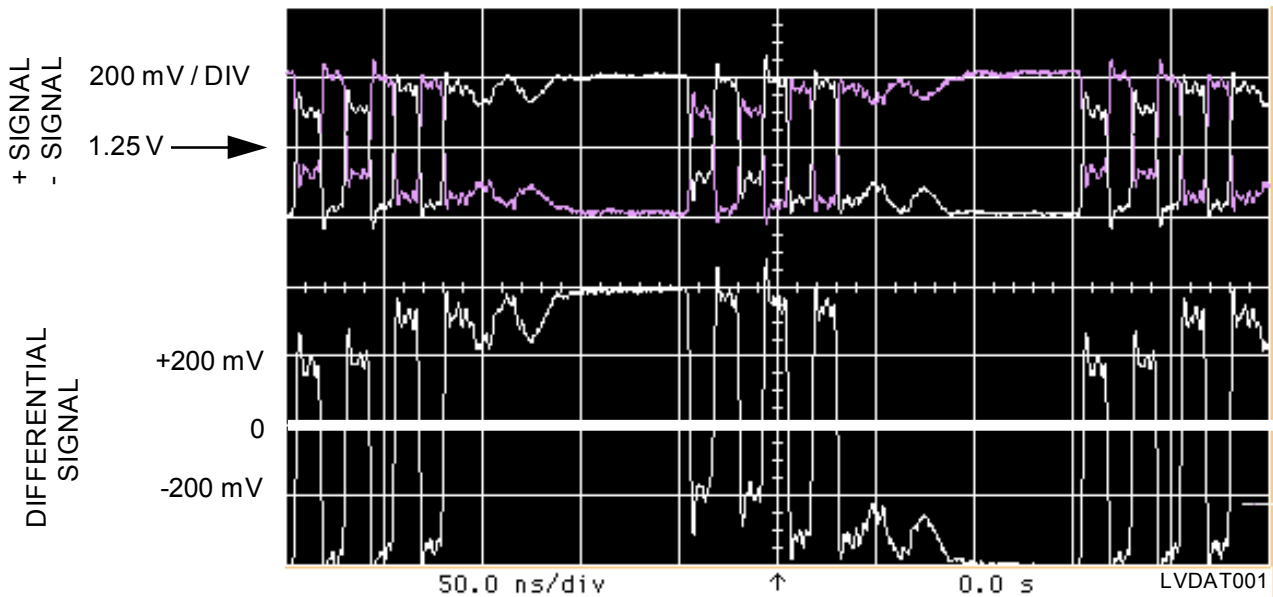
## LVD FAST 40 REQ/ACK TEST RESULTS WITH SYMMETRICAL DRIVERS AND TERMINATORS

- THE CRITERIA FOR ADEQUATE SIGNALS AT THE RECEIVER HAS BEEN CHANGED TO REFLECT THE REQUIREMENTS IN SPI-2 REV 6
- THIS REQUIRES THAT A CERTAIN AMOUNT OF “OVERDRIVE” BE AVAILABLE FOR SHORT PULSES FOLLOWING LONG PULSES
- THE OVERDRIVE FORMULA USED IS MAX OF 30 mV OR  $-0.25 * \text{PREVIOUS VLONG}$
- SYMMETRICAL DRIVERS AND TERMINATORS WERE USED AS WE HAVE FOUND IT IMPOSSIBLE TO SIMULATE ASYMMETRICAL DRIVERS IN THE LAB
- PREVIOUS WORK STRONGLY SUGGESTED THAT ASYMMETRICAL DRIVERS WOULD COMPENSATE FOR ASYMMETRICAL TERMINATORS
- THIS DATA SUGGESTS THAT A 15 METER LVD SEGMENT, ARBITRARILY LOADED WITH 15 20/20/10 DEVICES ON 8” CENTERS SHOULD WORK (USING 20pF/FT CABLE)
- POINT TO POINT LENGTHS OF ~ 35 METERS APPEAR REASONABLE

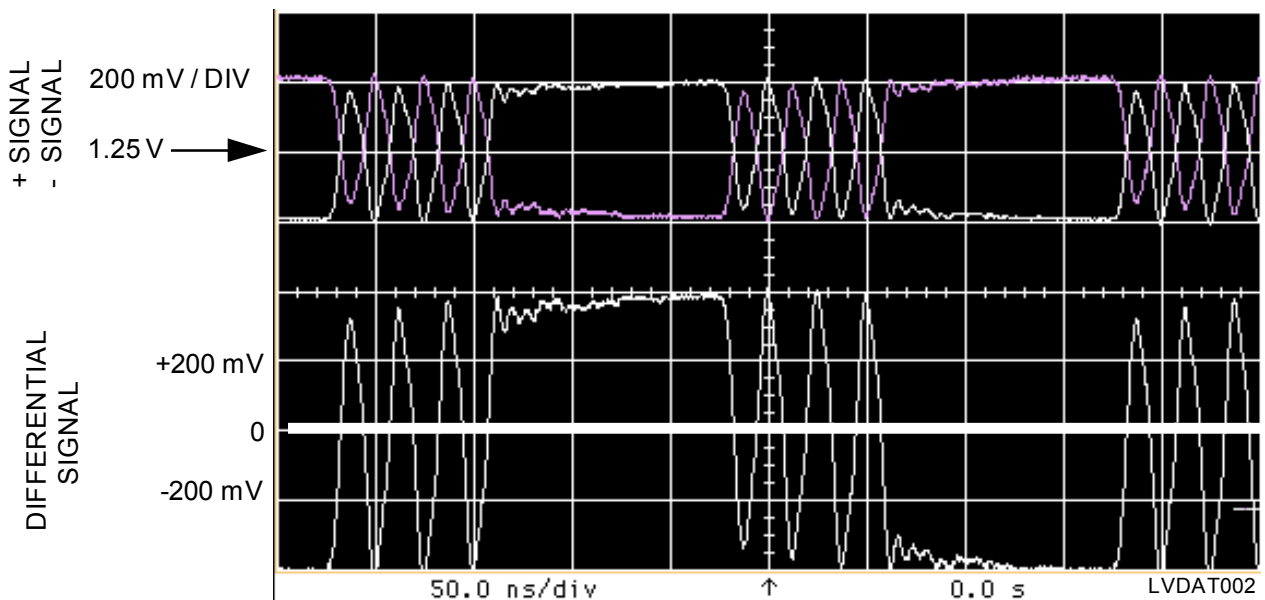
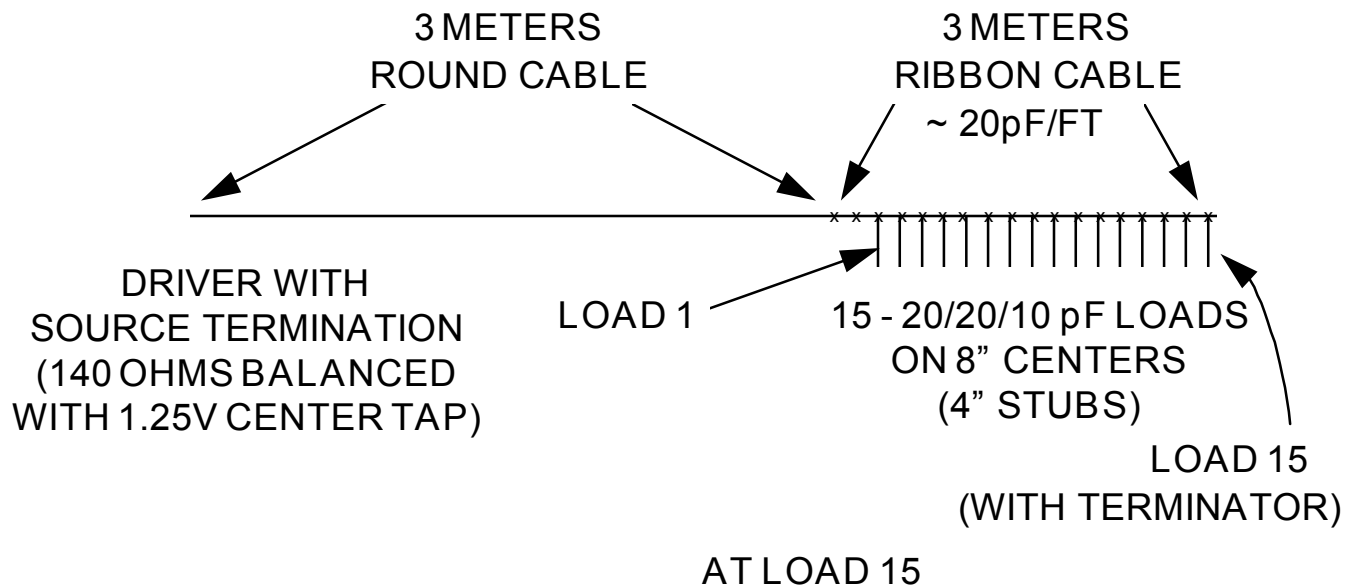
# LVD FAST 40 REQ/ACK TEST RESULTS WITH SYMMETRICAL DRIVERS AND TERMINATORS



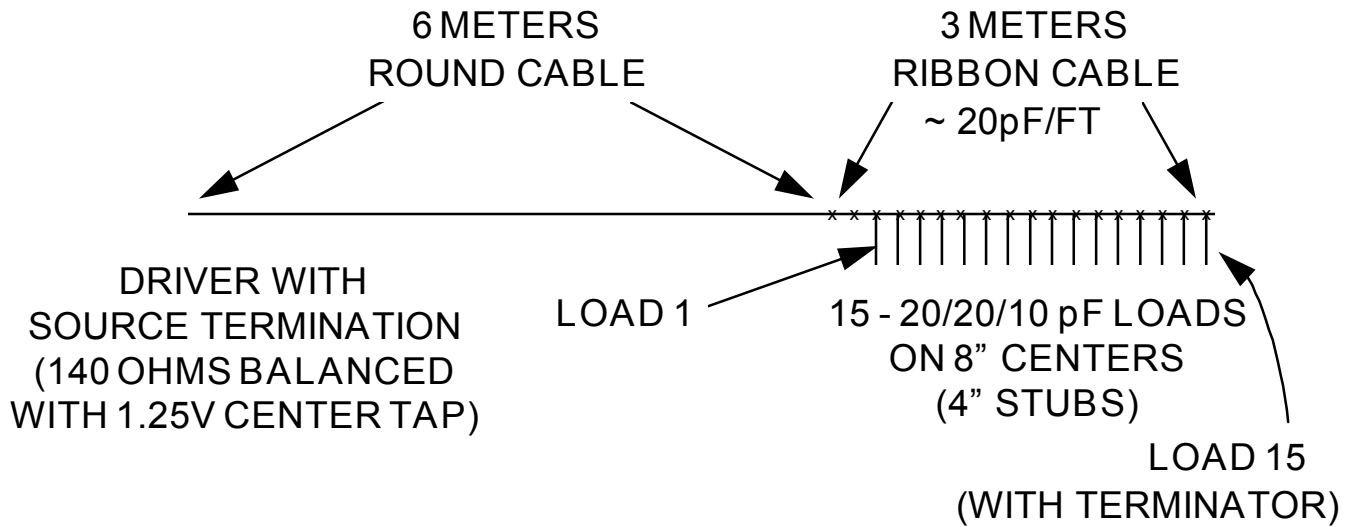
AT LOAD 1



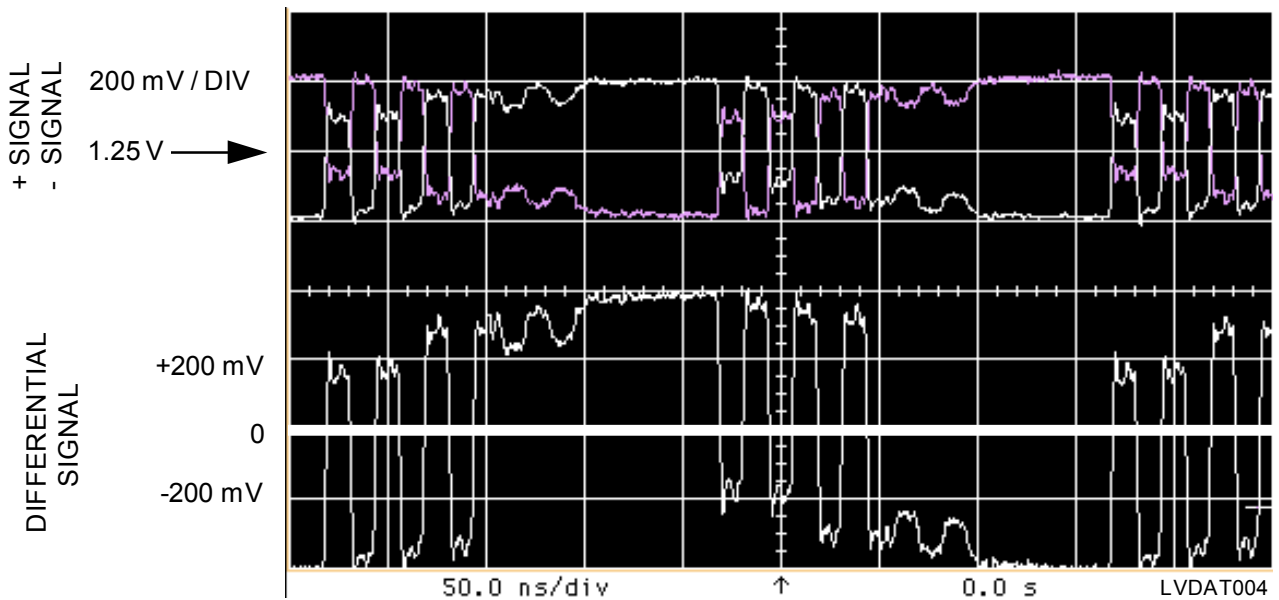
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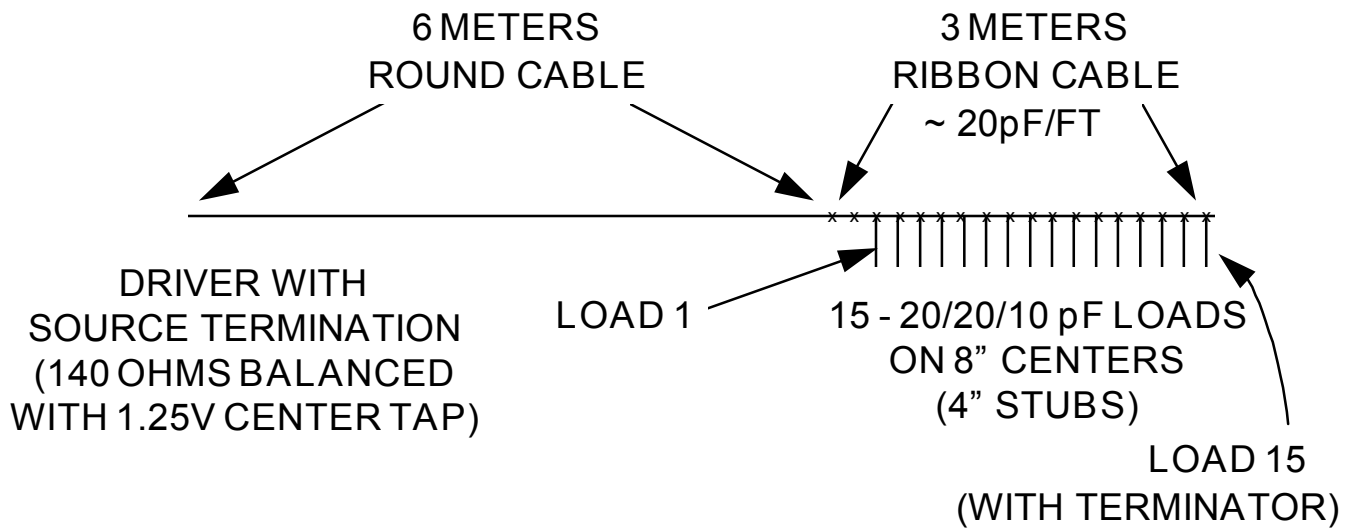
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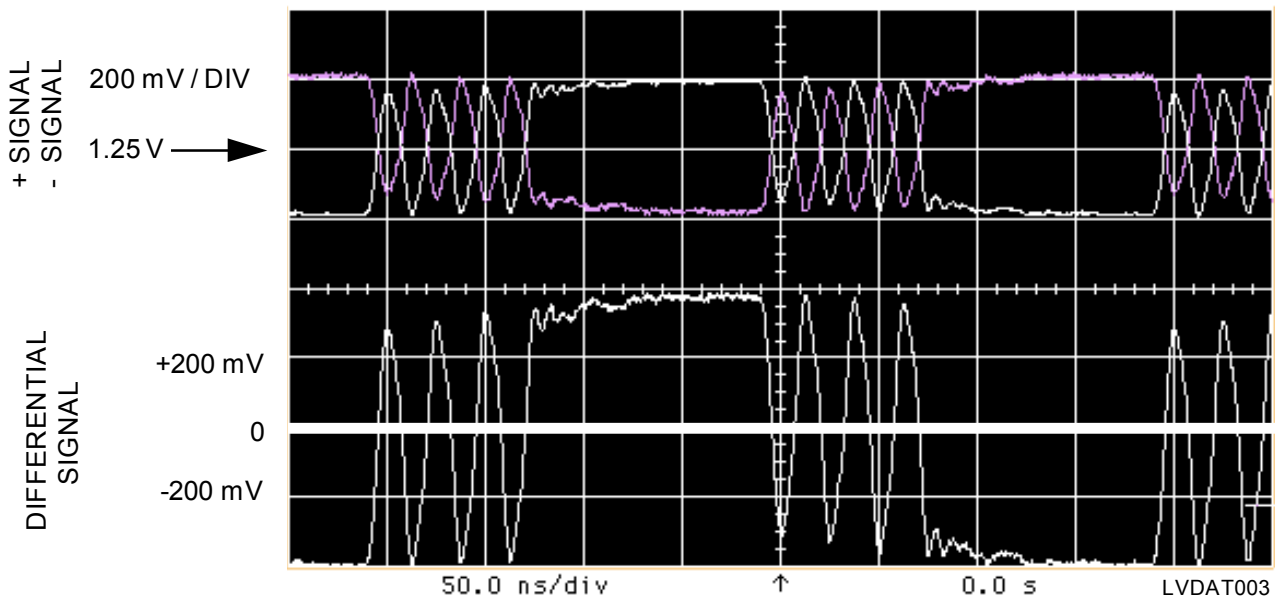
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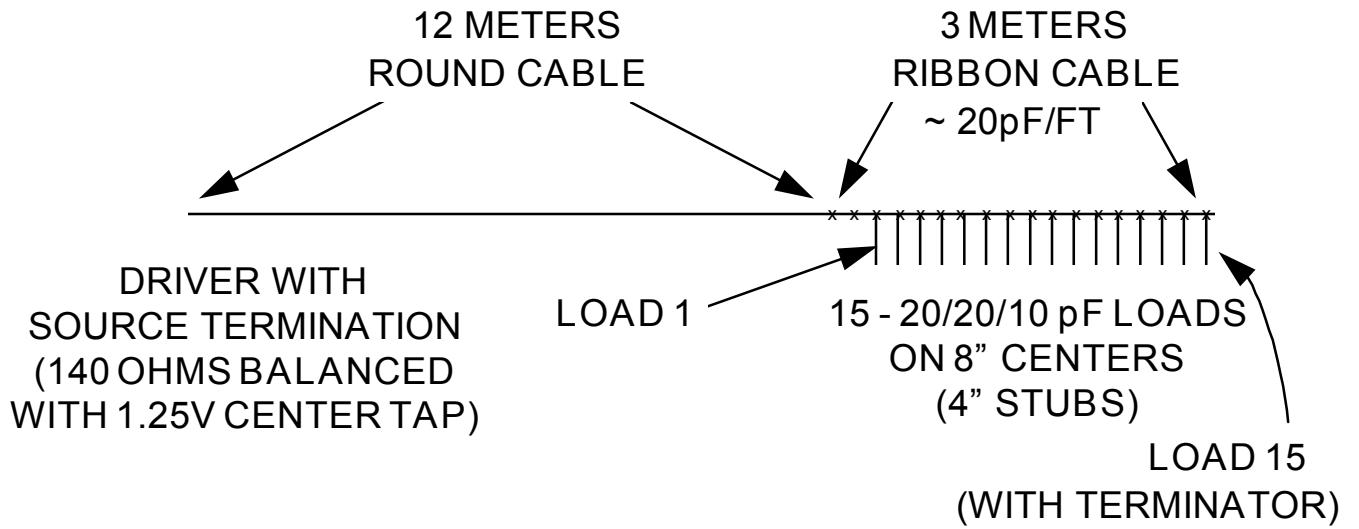
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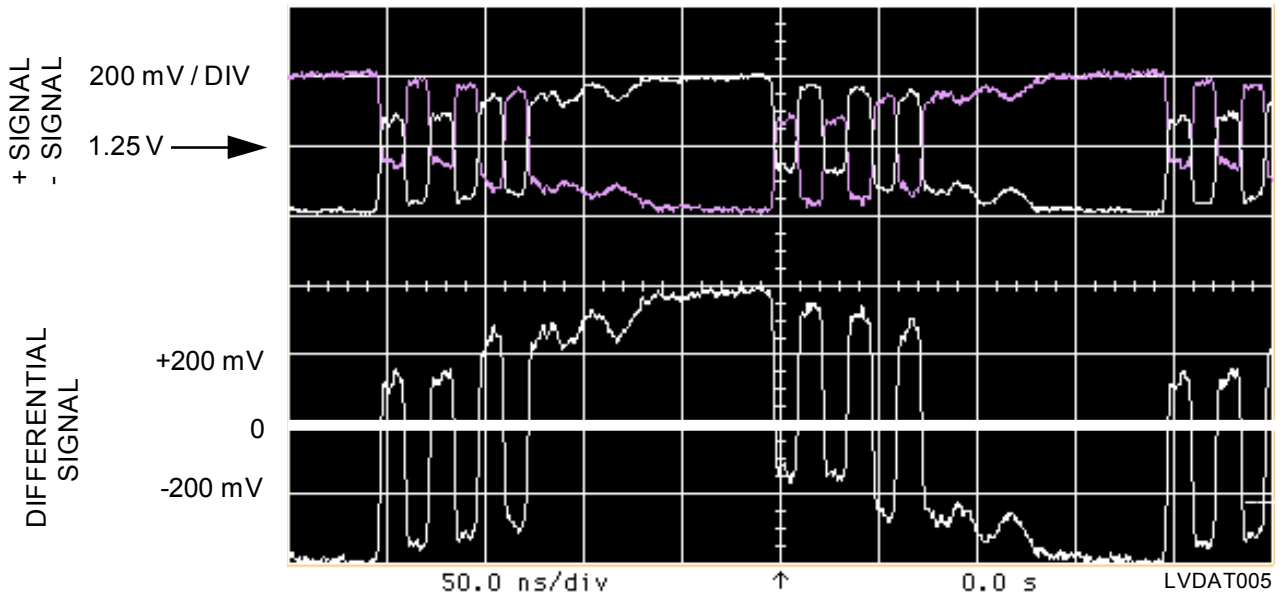
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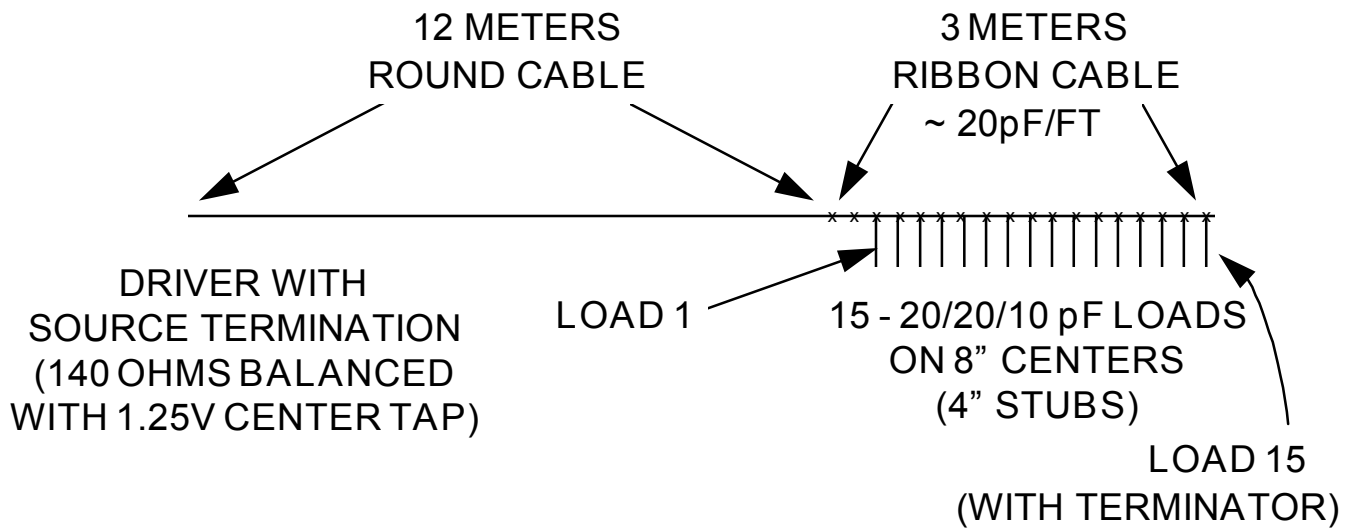
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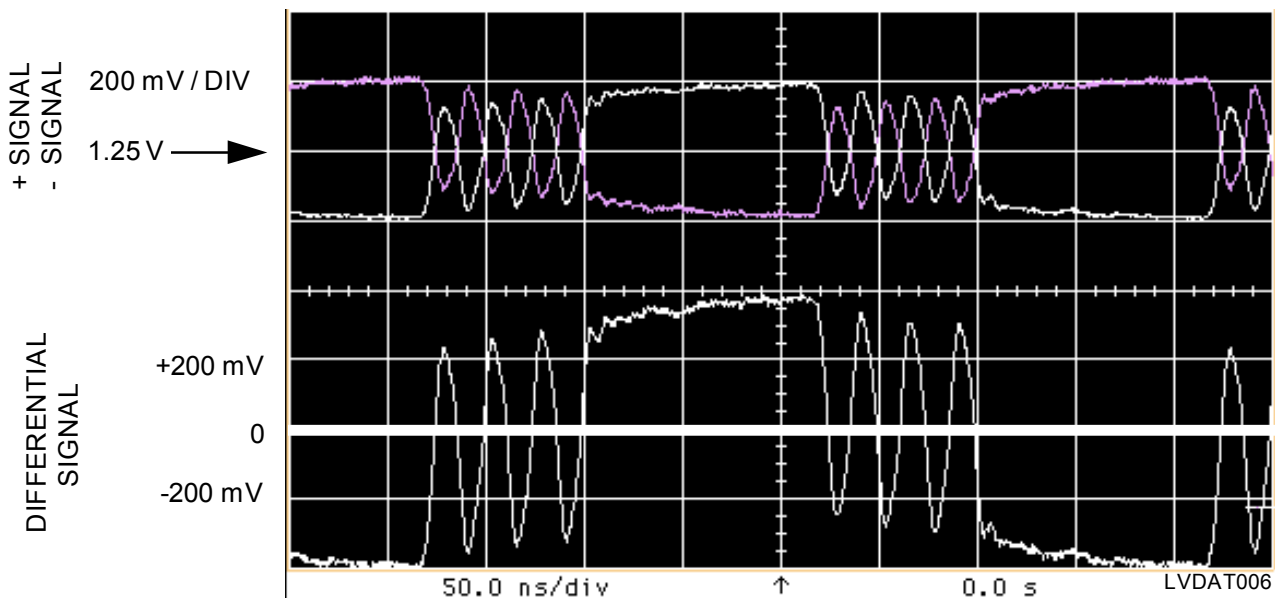
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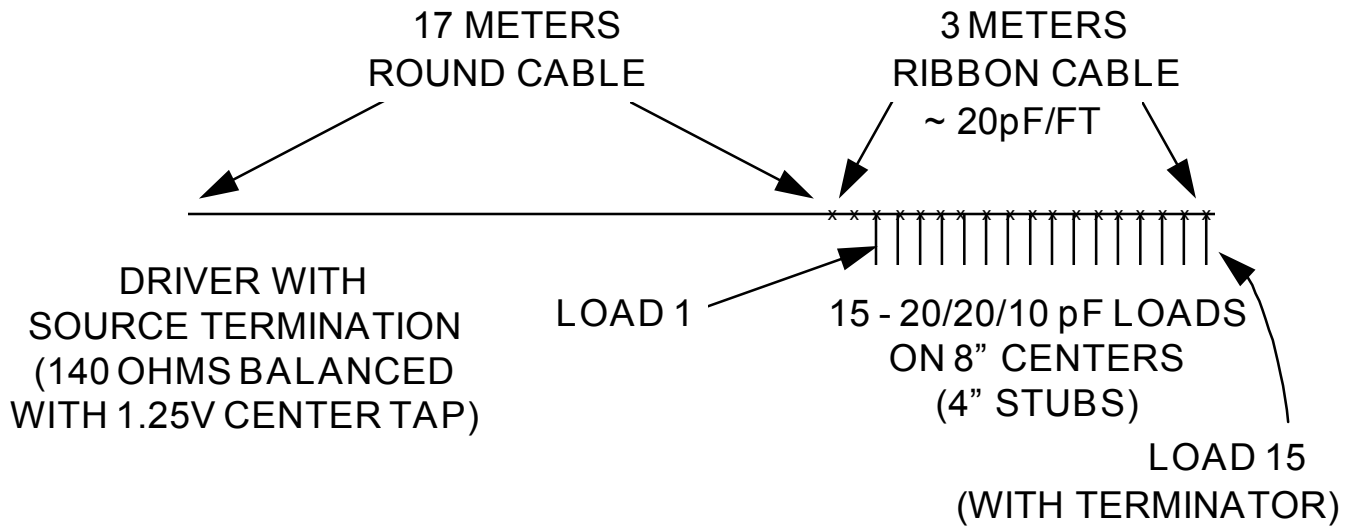
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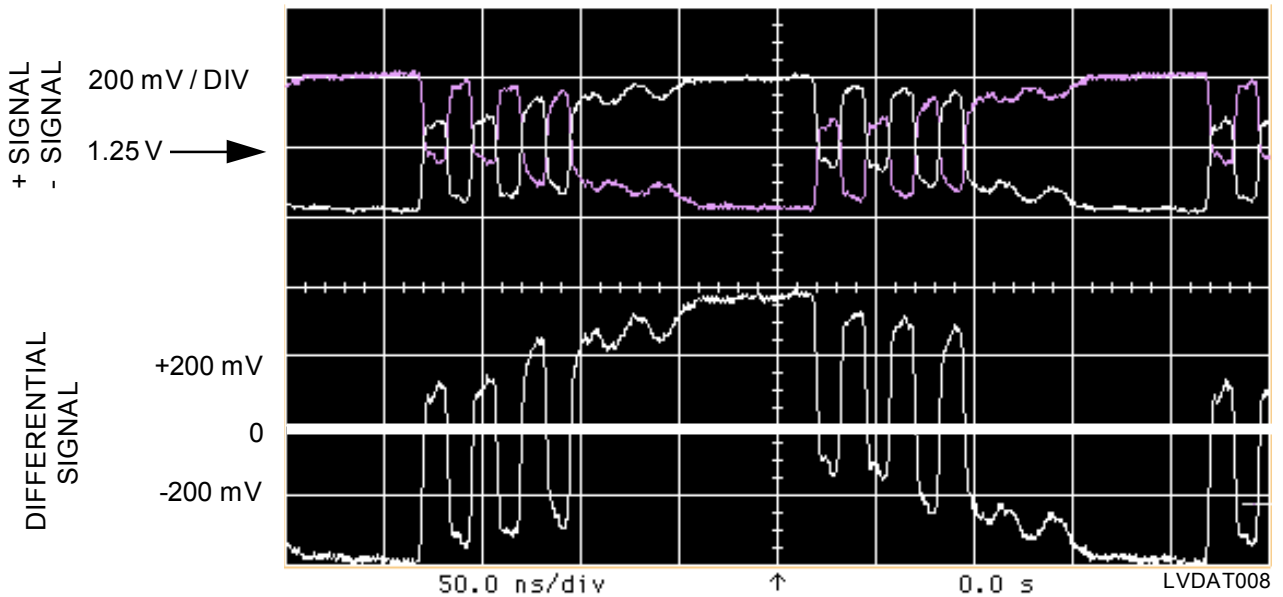
AT LOAD 15



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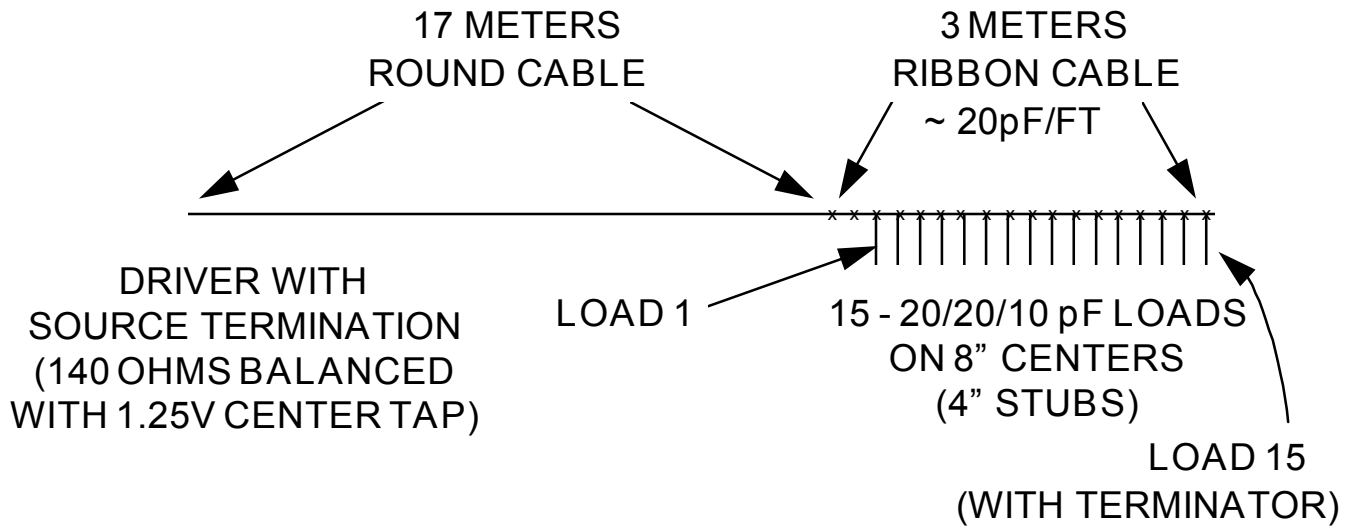


AT LOAD 1

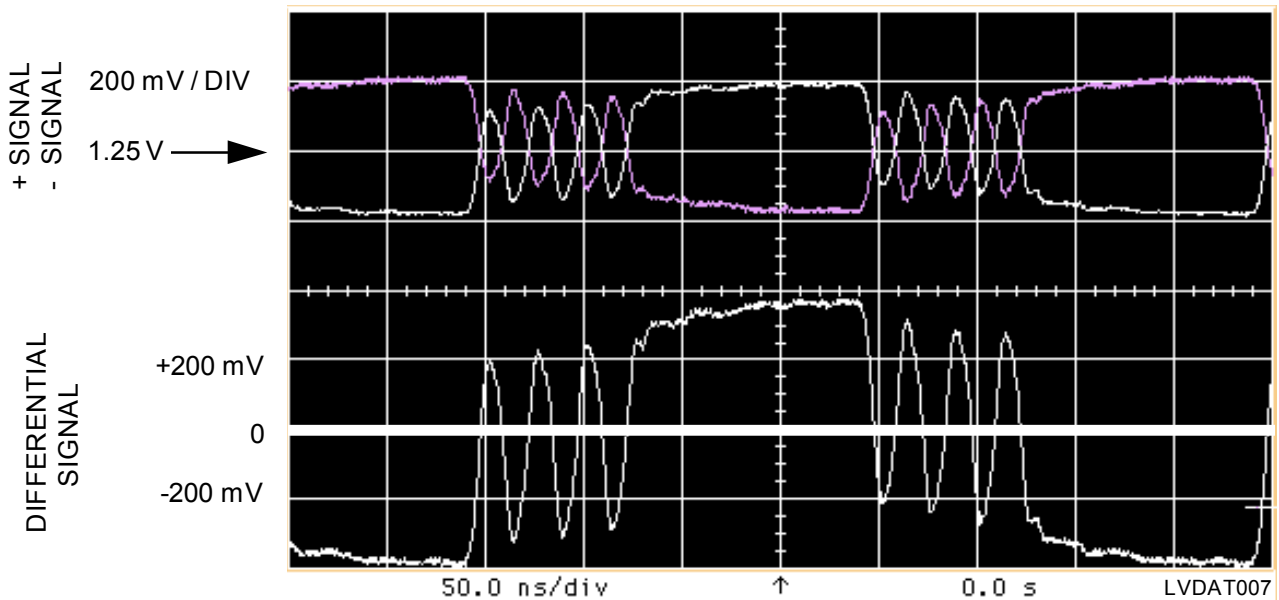




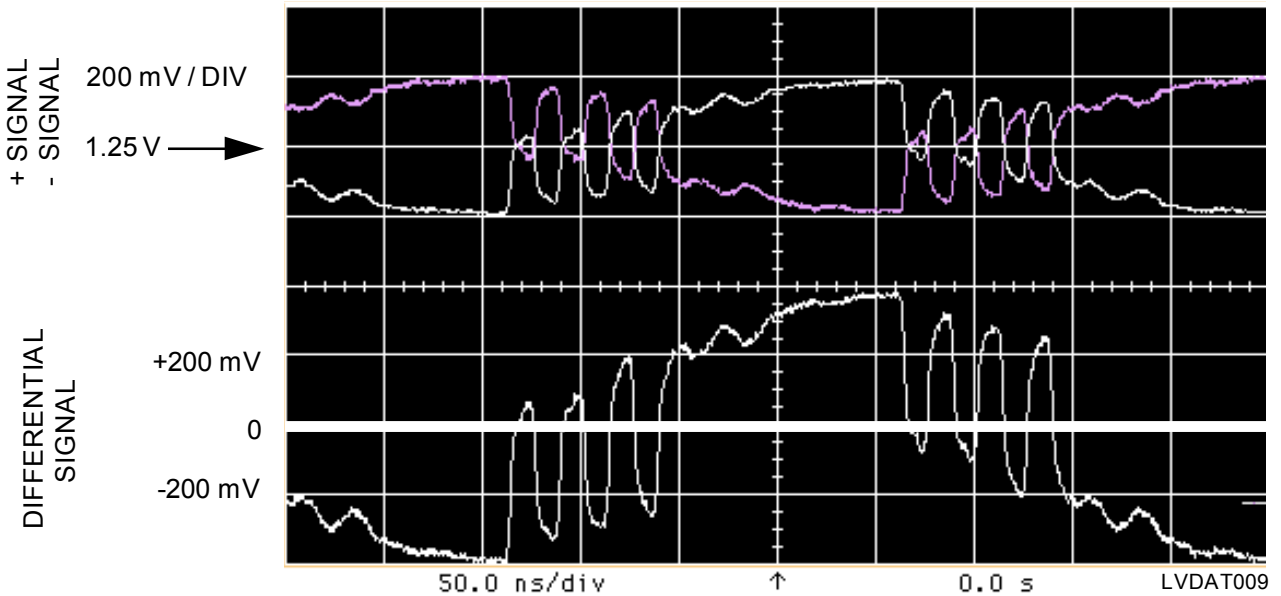
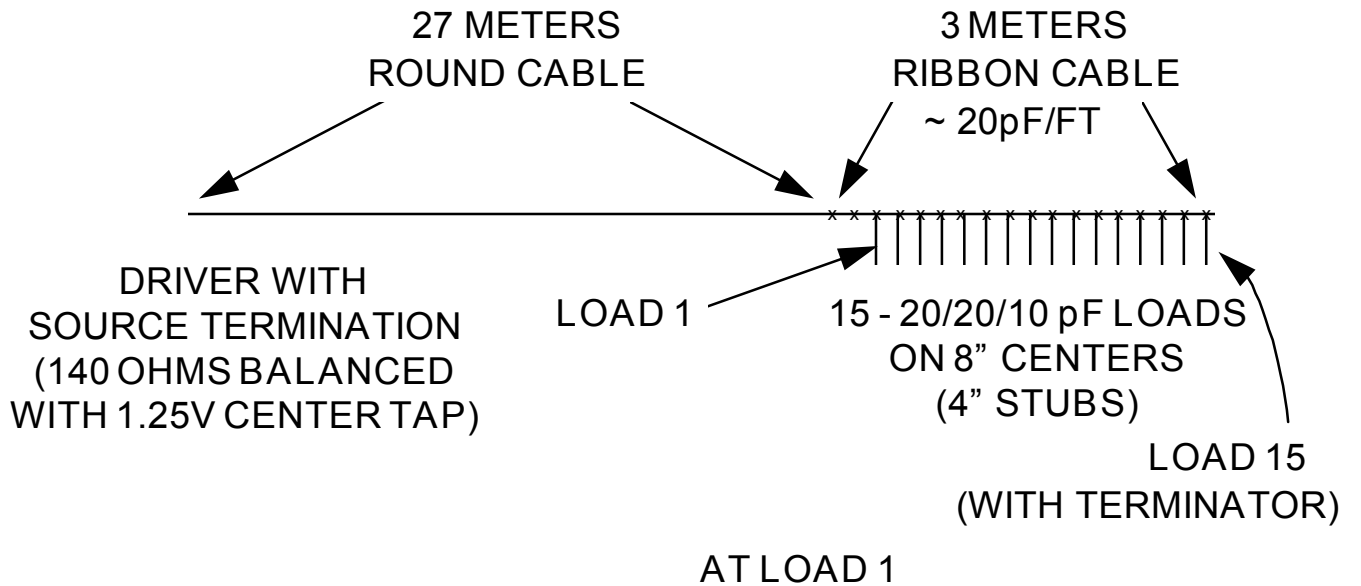
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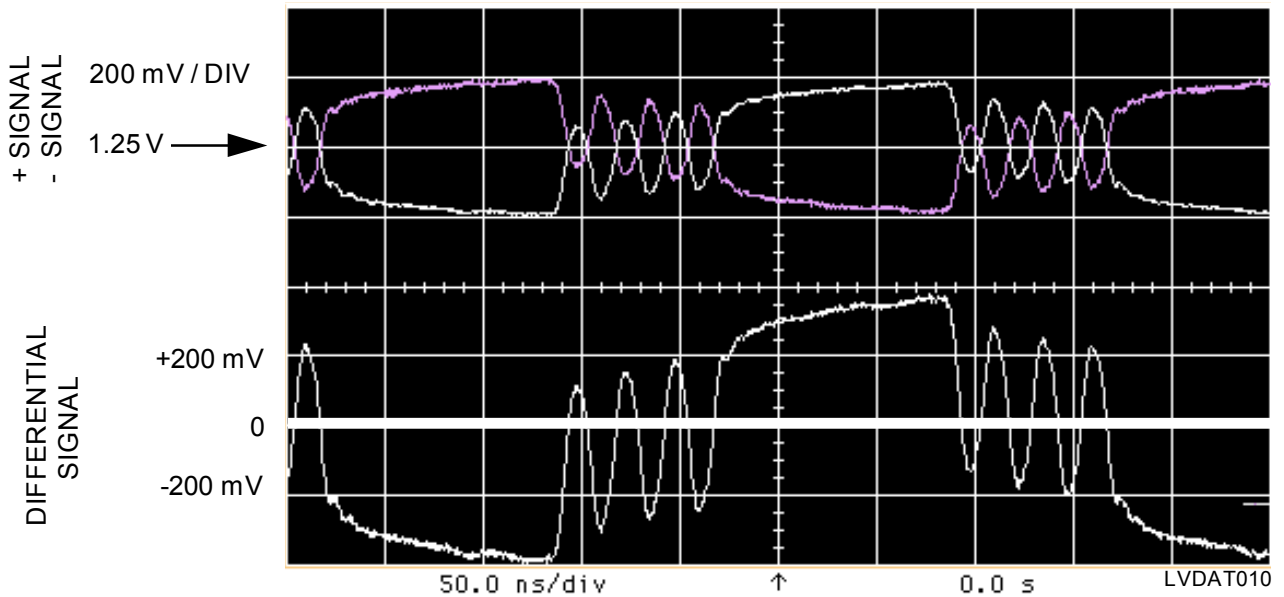
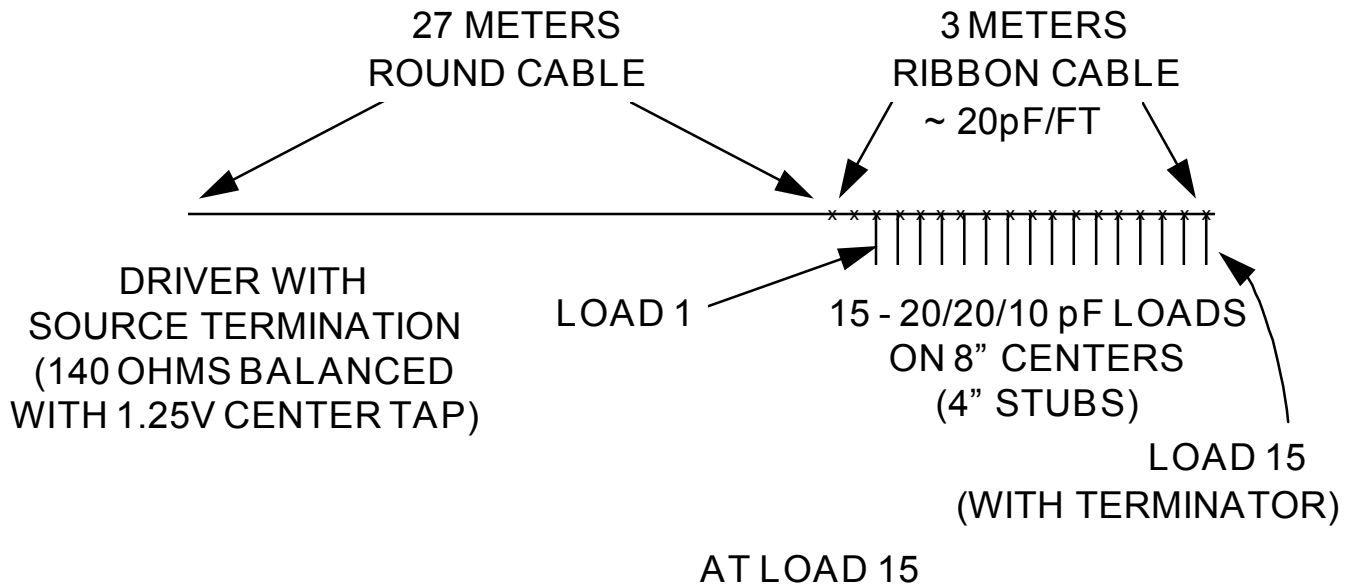
AT LOAD 15



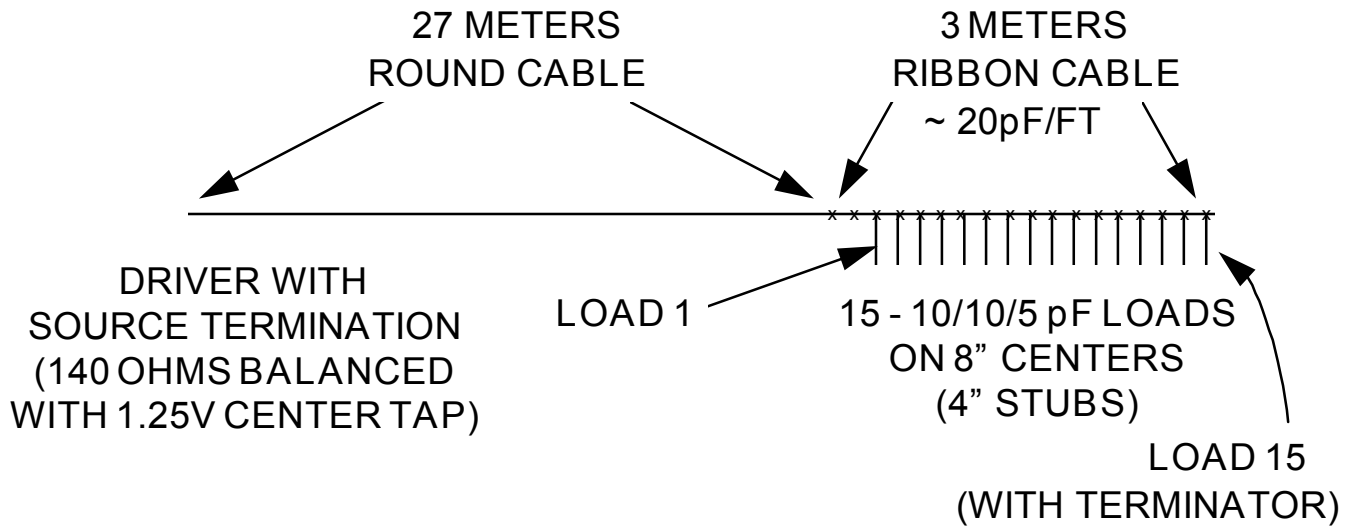
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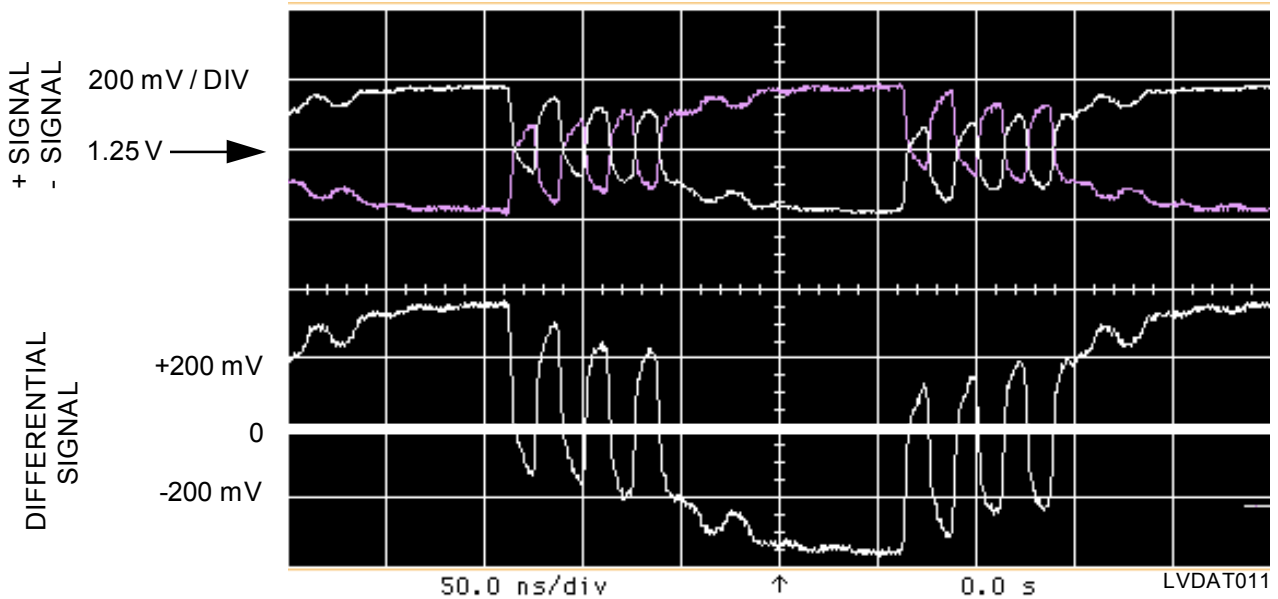
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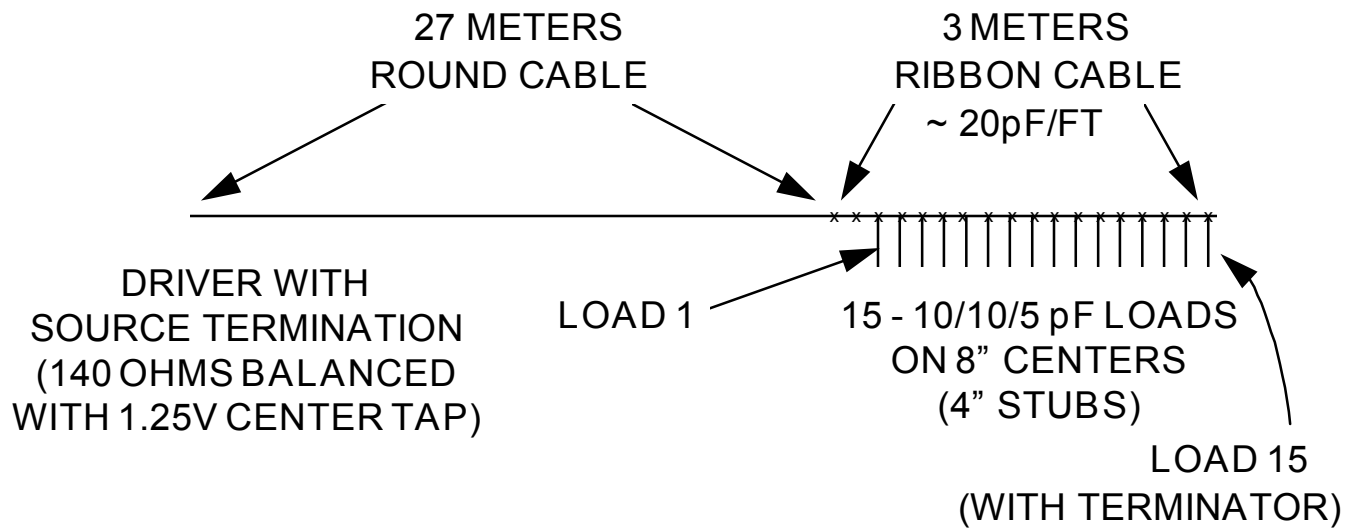
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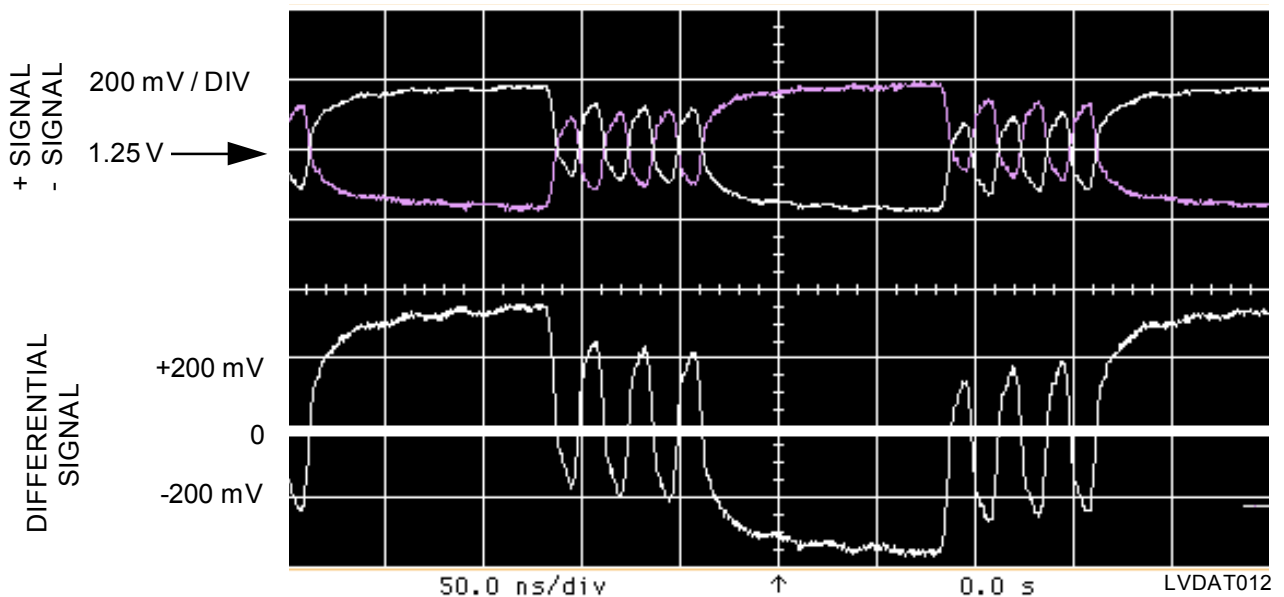
AT LOAD 1



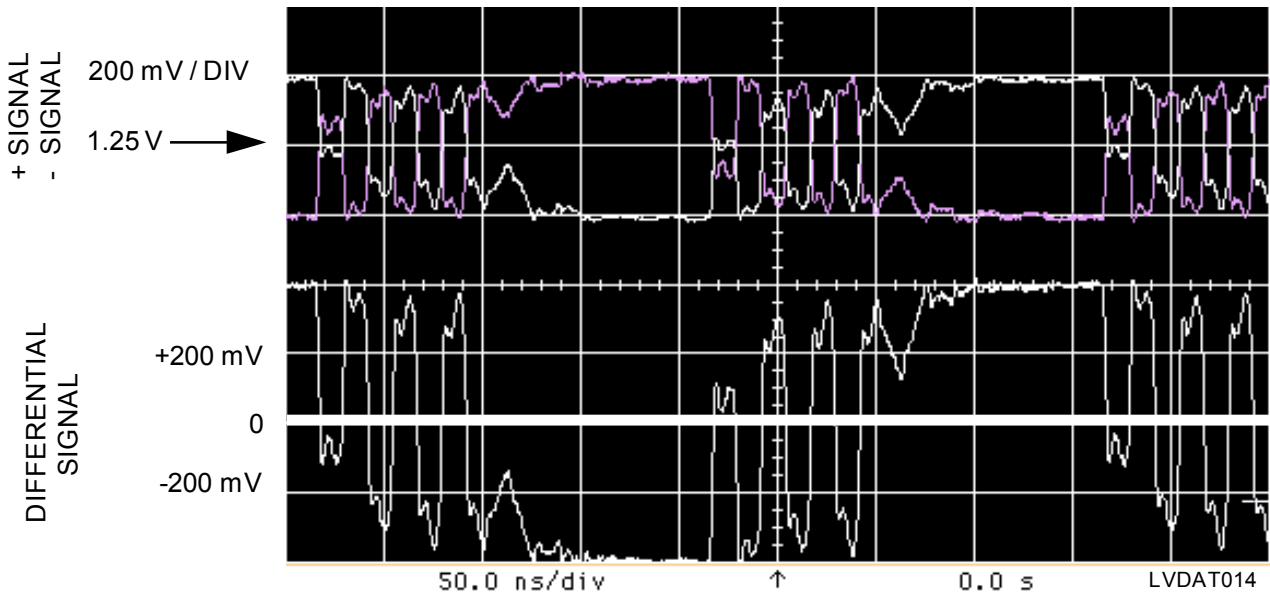
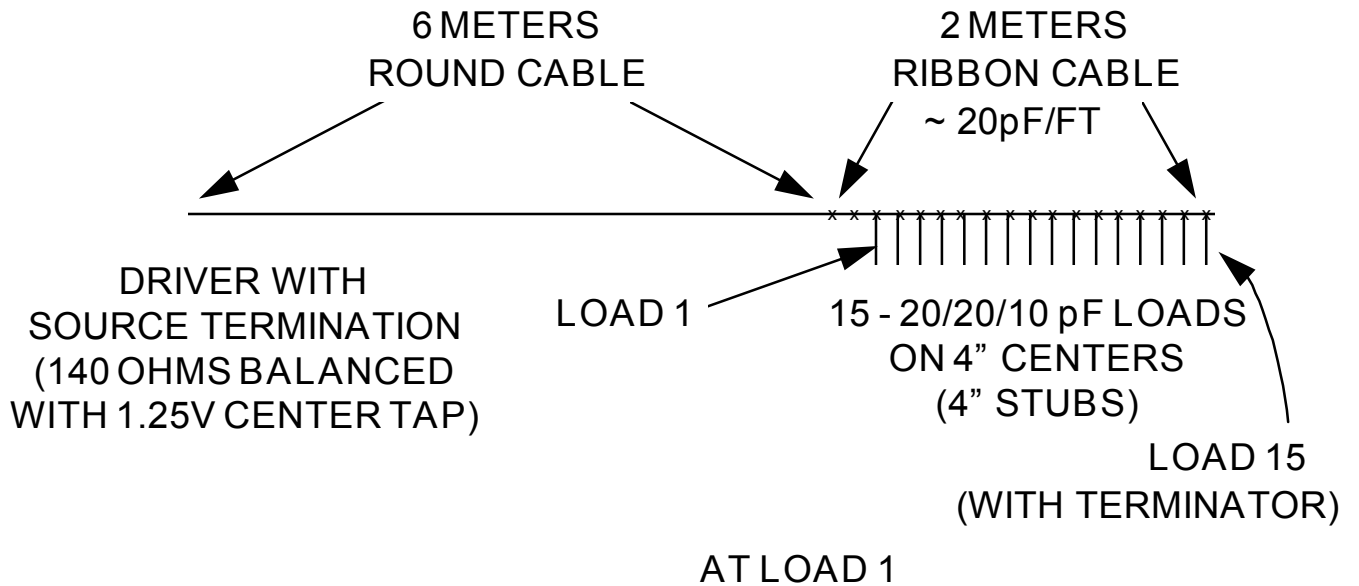
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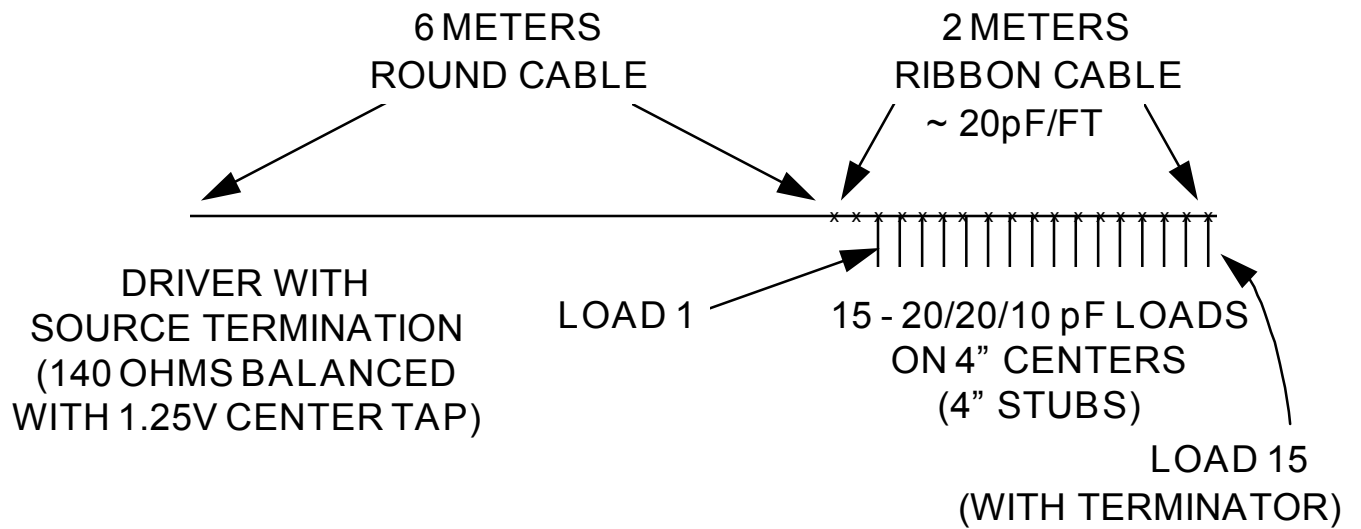
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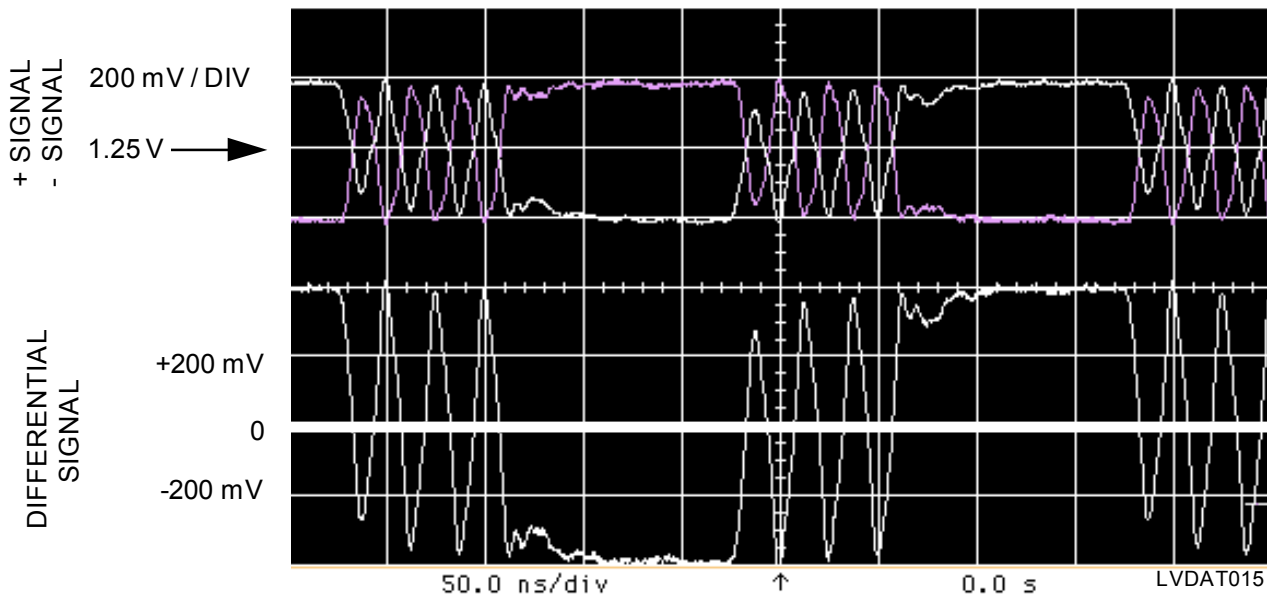
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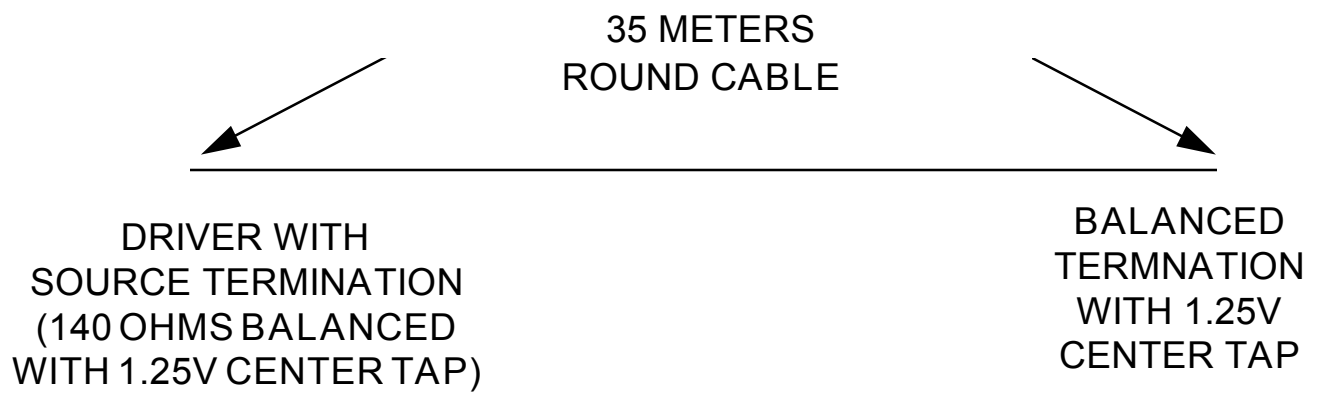
## LVD FAST 40 REQ/ACK TEST RESULTS WITH SYMMETRICAL DRIVERS AND TERMINATORS



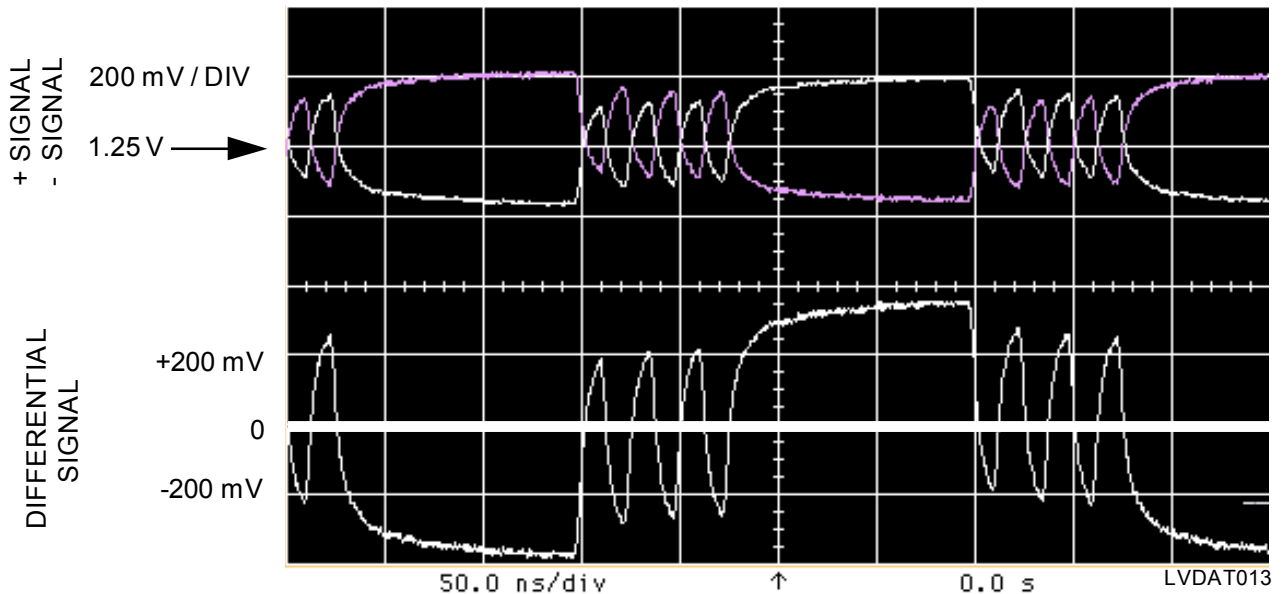
AT LOAD 15



# LVD FAST 40 REQ/ACK TEST RESULTS WITH SYMMETRICAL DRIVERS AND TERMINATORS



## AT FAR TERMINATOR





# LVD FAST 40 REQ/ACK TEST RESULTS WITH SYMMETRICAL DRIVERS AND TERMINATORS

X3T10/96-159r0

## TENTATIVE FAST 40 CONFIGURATION RULES:

- DEVICE CAPACITANCE NOT GREATER THAN 20/20/10 pF (C1,C2,C3)
- DEVICE SPACING NOT CLOSER THAN EQUIVALENT OF 8" WITH 20pF/FT MEDIA (E.G. 4" WITH 40 pF/FT MEDIA)
  - THIS RULE APPLIES AT ANY LENGTH - SHORTER LENGTHS DO NOT AFFECT THIS REQUIREMENT
- WITH MAXIMUM LOADING PRESENT ANYWHERE IN THE SEGMENT THE MAXIMUM LENGTH IS 15 METERS
- WITH LOADING LESS THAN THE EQUIVALENT OF 20/20/10 DEVICES AT 1 METER SEPARATION THE MAXIMUM LENGTH IS 25 METERS
- POINT TO POINT MAX SEGMENT LENGTH IS 35 METERS
- ALL OTHER REQUIREMENTS IN SPI-2 REV 06 SHALL BE IMPLEMENTED