

# LVDS serial link test

- FPD (Flat Panel Display) link demo kit
  - National Semiconductor
- XBERT (Bit Error Rate Tester)
  - Fermilab
- work done by John Yook (BU)
- thanks to Don Husby (FNAL)

# LVDS serial link test

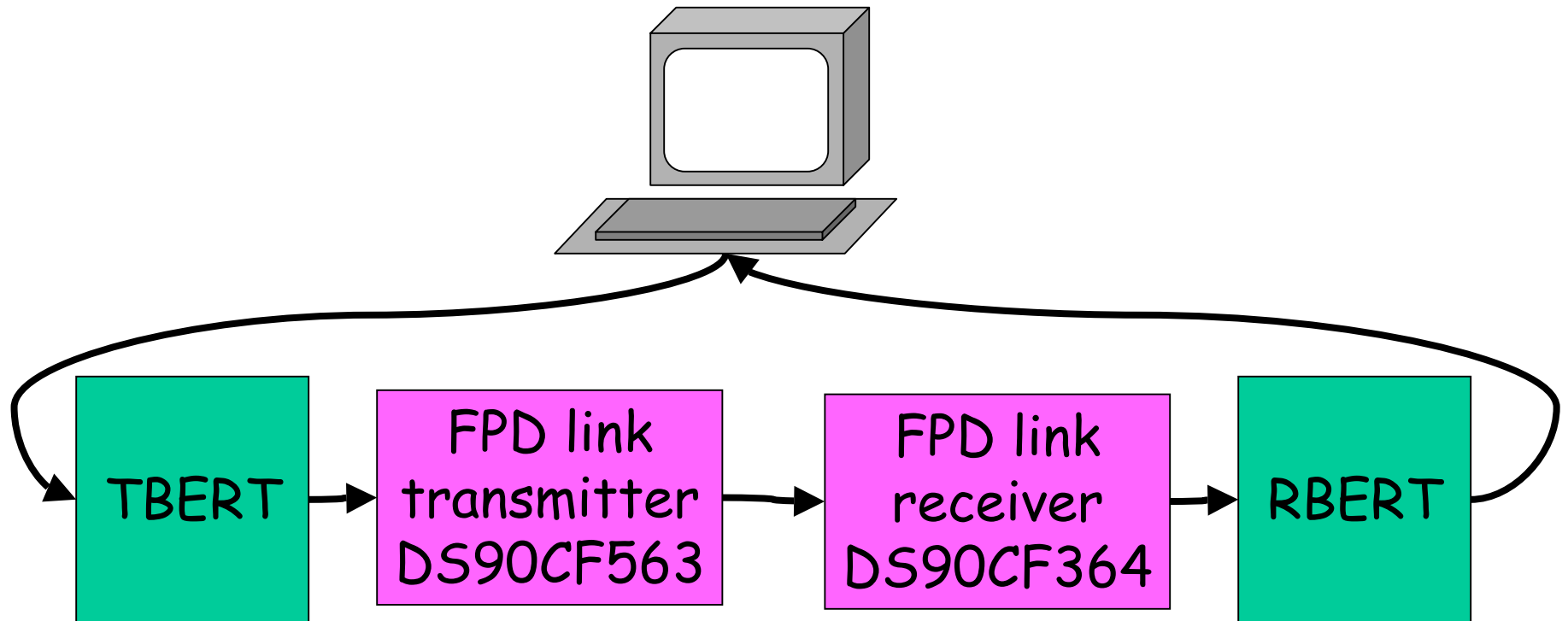
## FPD transmitter

- 65 MHz
- accept  
parallel TTL/CMOS
- convert to  
serial LVDS
- transport at 7×  
speed

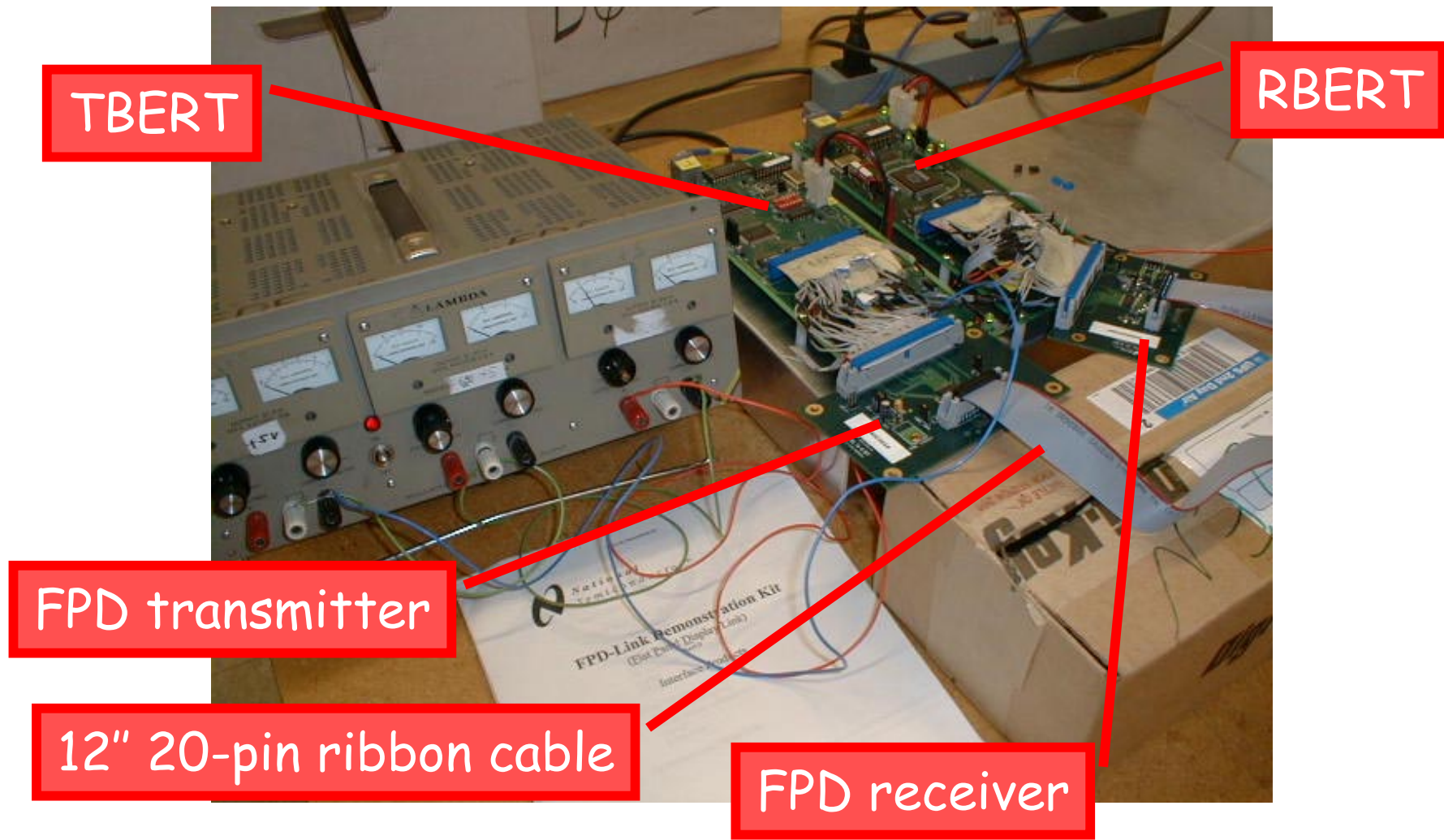
## FPD receiver

- 65 MHz
- accept  
serial LVDS  
*(3 channels + clock)*
- convert to  
parallel TTL/CMOS

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11/19/1999

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<i><b>Clock frequency</b></i>	<i><b>Duration</b></i>	<i><b>Bits transferred*</b></i>	<i><b>errors</b></i>
40 MHz	17 h	$4 \times 10^{13}$	0
42 MHz	76 h	$2 \times 10^{14}$	0
48 MHz	23 h	$7 \times 10^{13}$	0

\* 17 bits transferred per clock cycle