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Find the *Anritsu MP1630B* at our website: ***Click HERE***

Anritsu

APPLICATION NOTE

MP1630B
Digital Data Analyzer

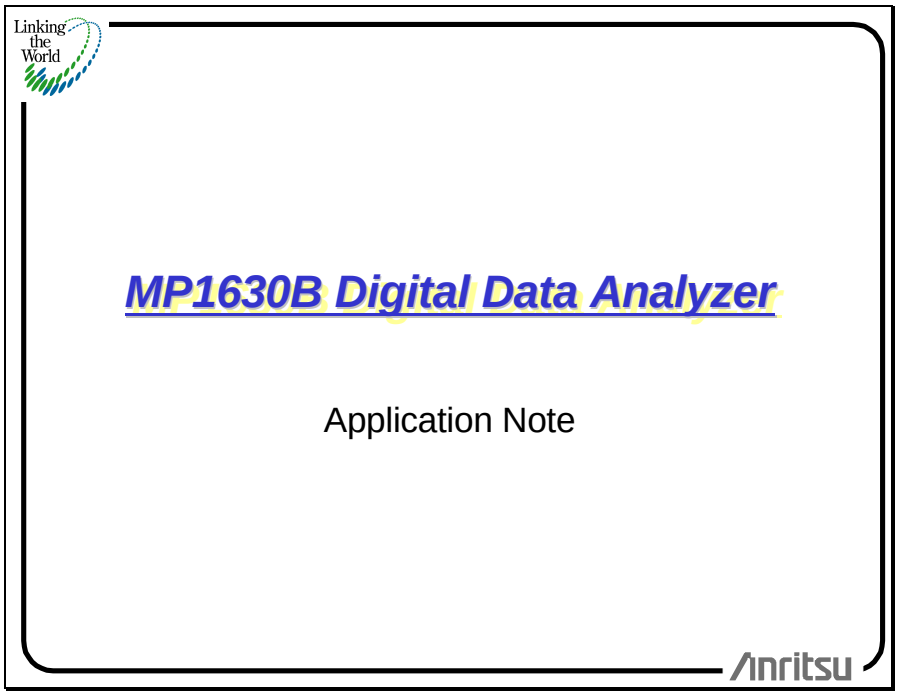
MEASUREMENT GROUP
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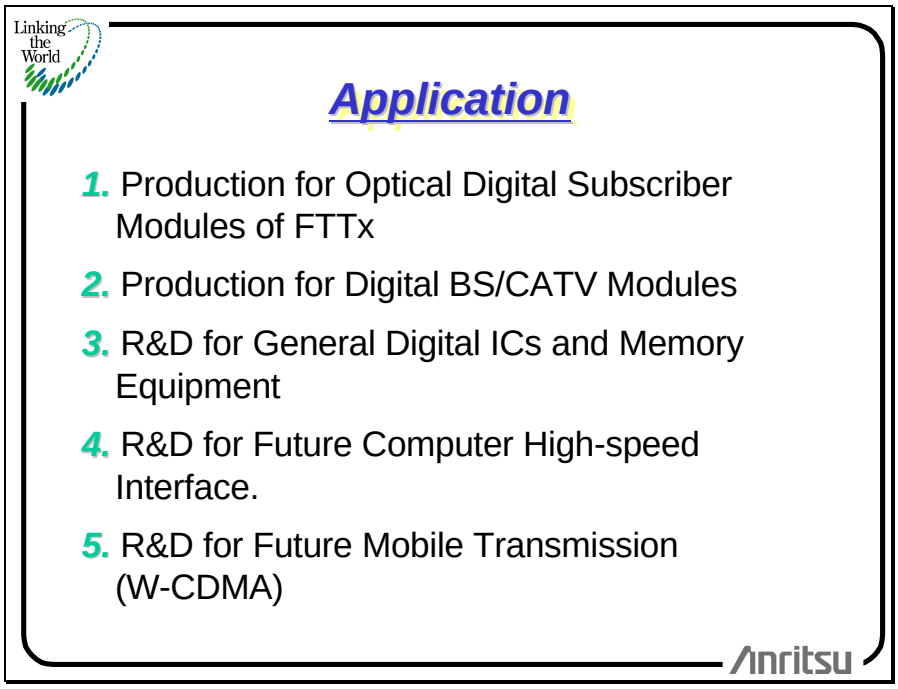
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The MP1630B is a general-purpose bit error measuring instrument that can perform simultaneous measurement of multiple channels at up to 200 Mb/s, as well as burst-signal measurement.

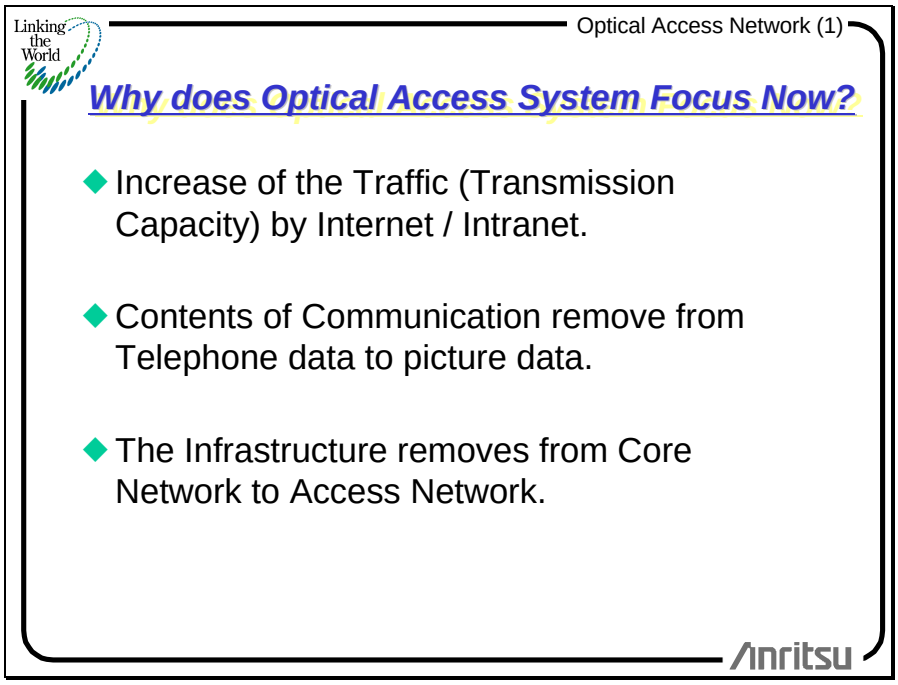


The MP1630 can measure bit error rates of both continuous and burst signals. Consequently, it can be used for TDMA (Time Division Multiplex Access) methods as well as for packet and cell transmissions, neither of which were supported by earlier bit error measuring instruments.

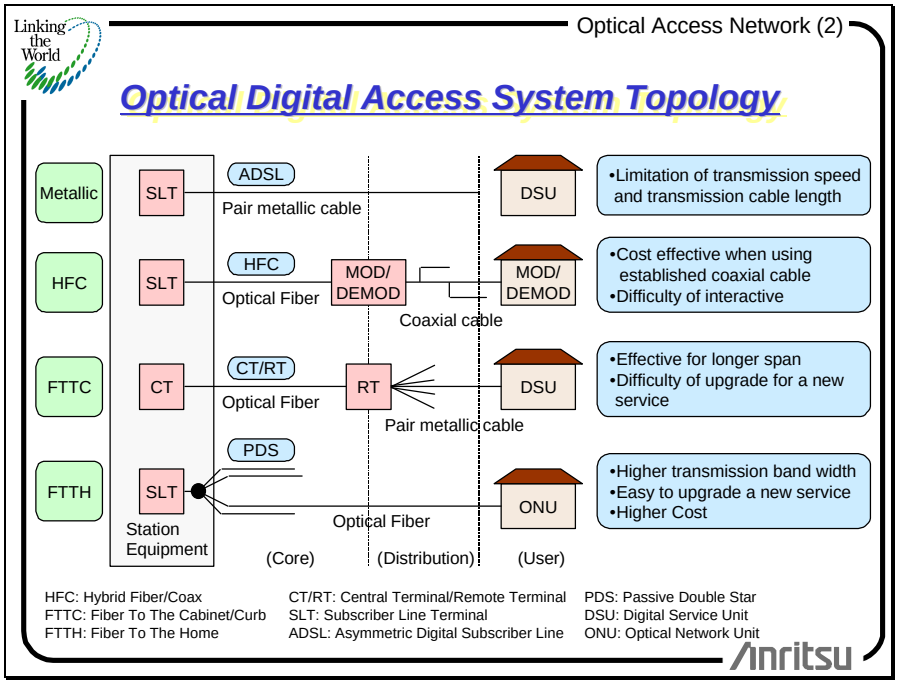


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Communications traffic is increasing almost daily, requiring massive increases in the capacity of access networks.
This is being achieved by converting access networks to optical technology.

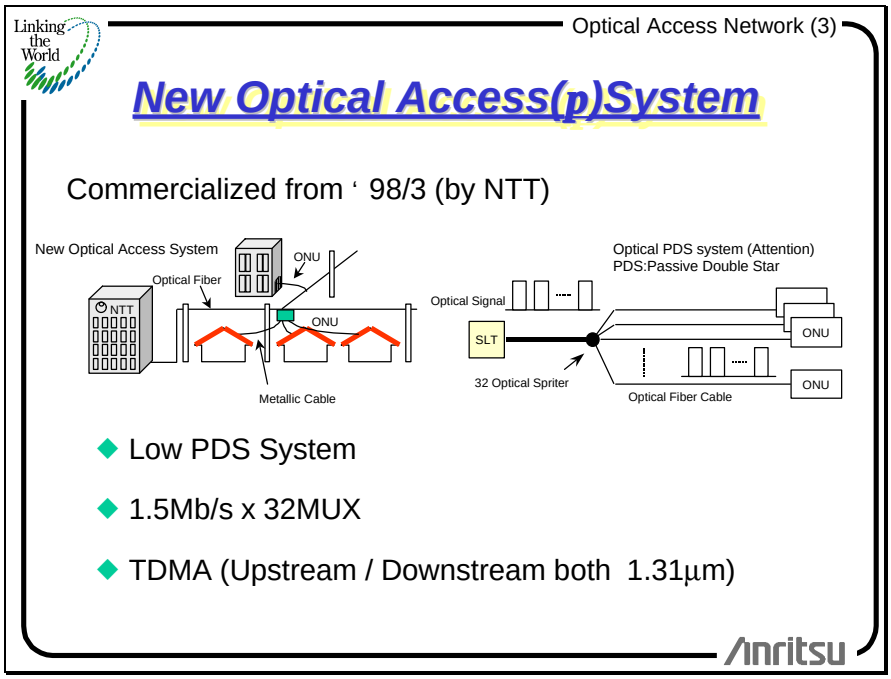


Several methods can be used for optical digital subscribers.
Each method has specific requirements for the local telecommunications infrastructure.

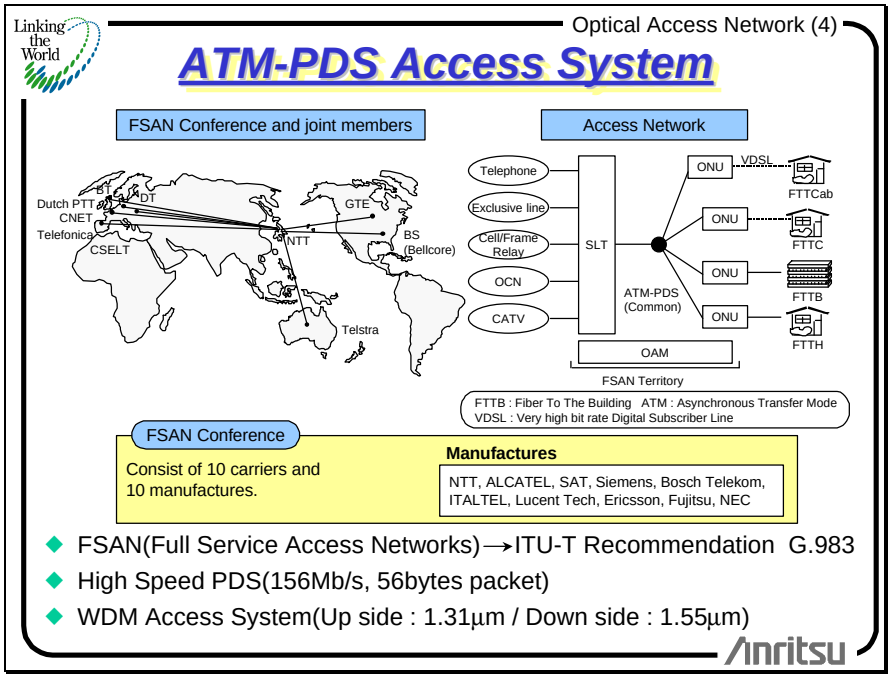


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NTT is presently commercializing a new optical access network system called (π) System.
(π) System is a low-speed PDS (Passive Double Star) system based on TDMA.

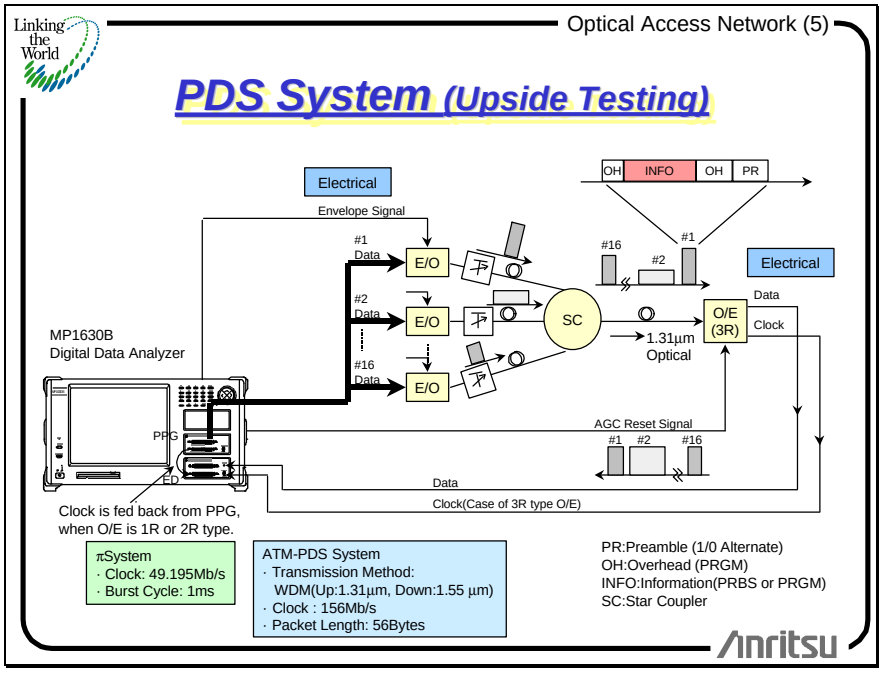


ATM-PDS is a high-speed PDS system supporting ATM technology. It offers users various services such as telephone and video by multiplexing ATM cells.

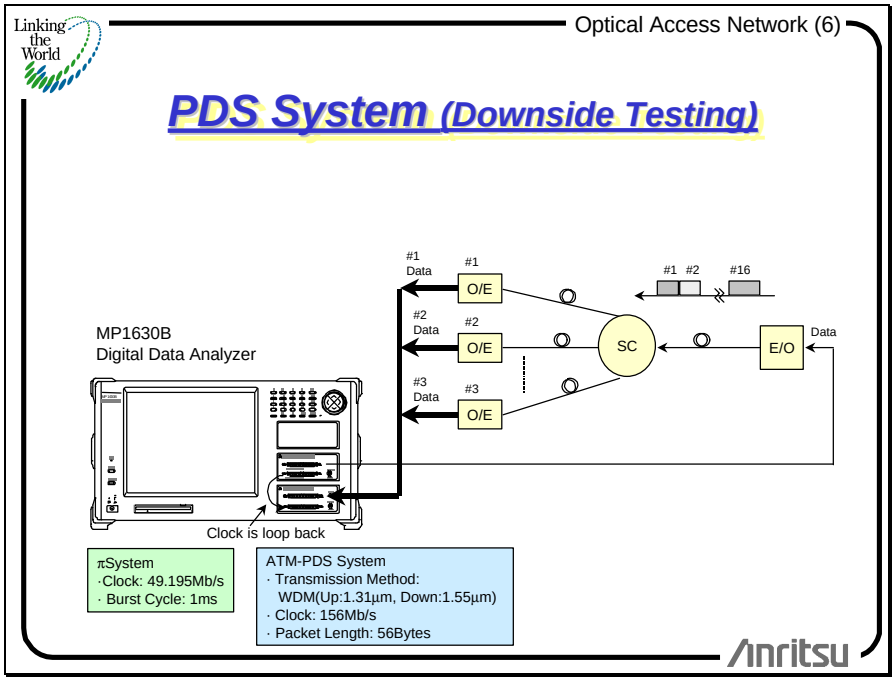


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Here, in this PDS system, data is passing from the home to station and 16 channels can be measured simultaneously.

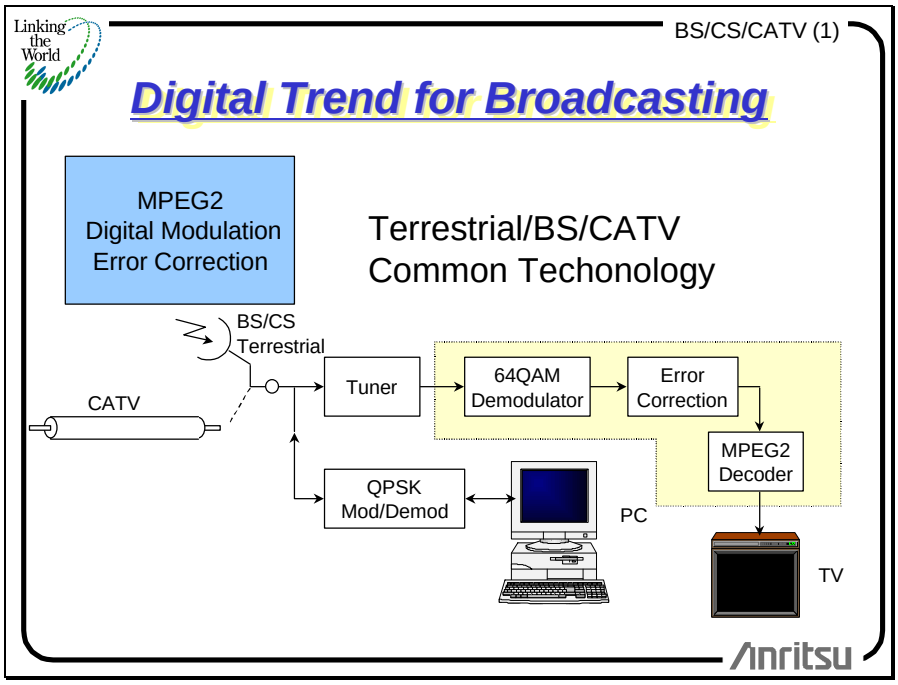


In this PDS system, data is flowing from the system to the home and 16 channels can also be measured simultaneously.

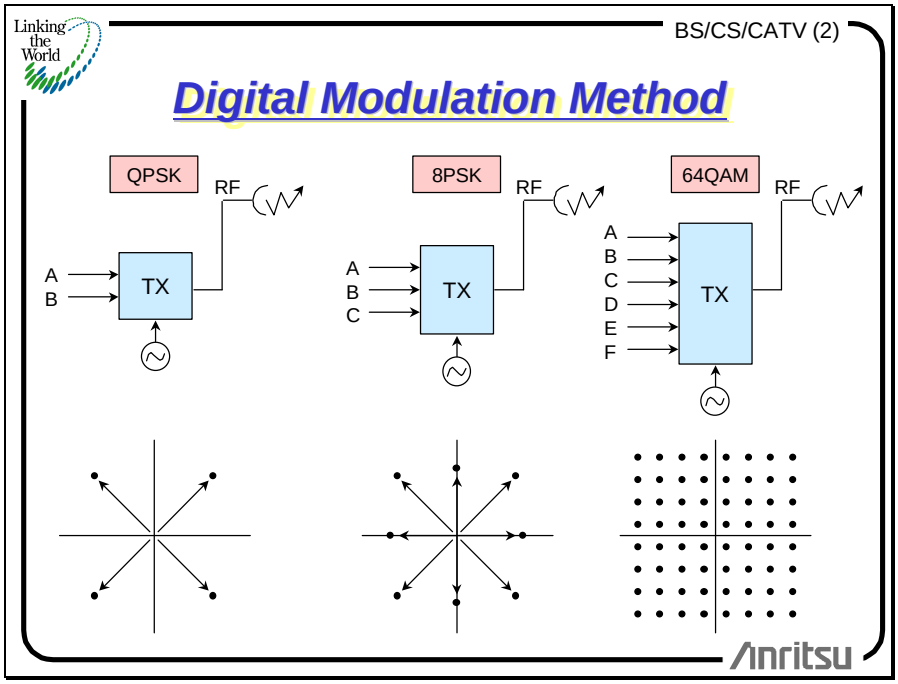


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Viewers will be able to receive a huge variety of program contents due to the spread of digital broadcasting and shared technologies.

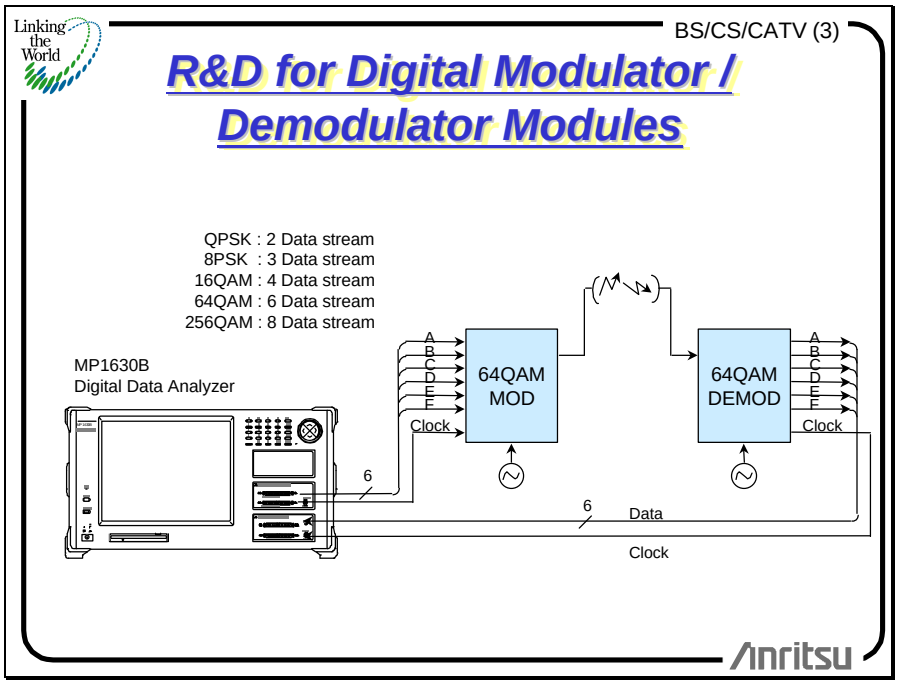


Digital broadcasting uses a variety of digital modulation methods.

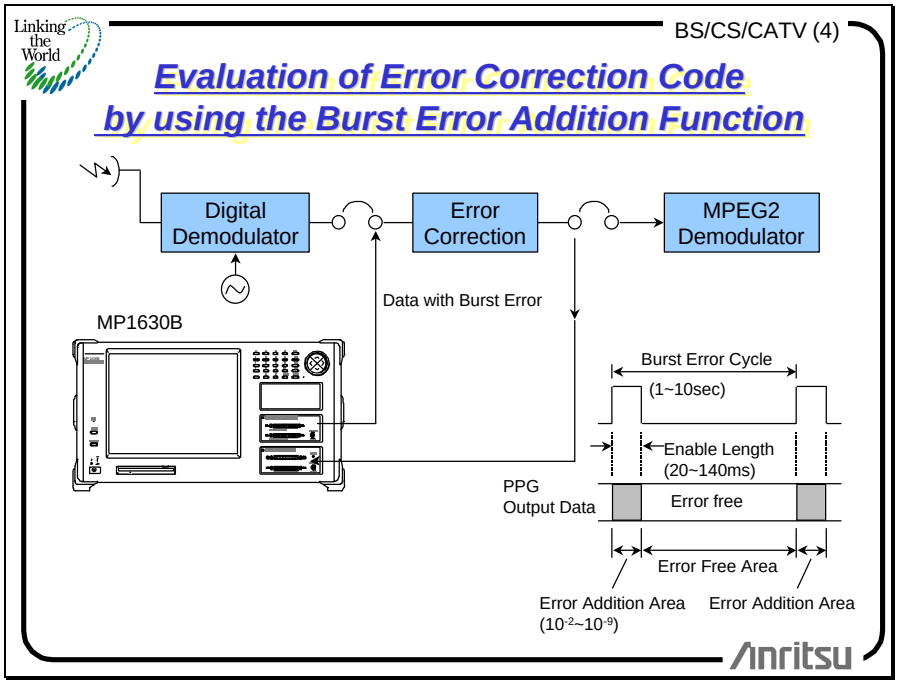


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Since the MP1630B can measure multiple channels simultaneously, the performance of each type of digital modulator can be evaluated easily.



The MP1630 can add burst errors.
The error rate and burst cycle can be varied, making it possible to evaluate the performance of error correction circuits at various setting conditions.



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Just one MP1630B can handle evaluation of various digital devices performing multi-channel signal processing, for example the MUX/DEMUX.

Digital Devices (1)

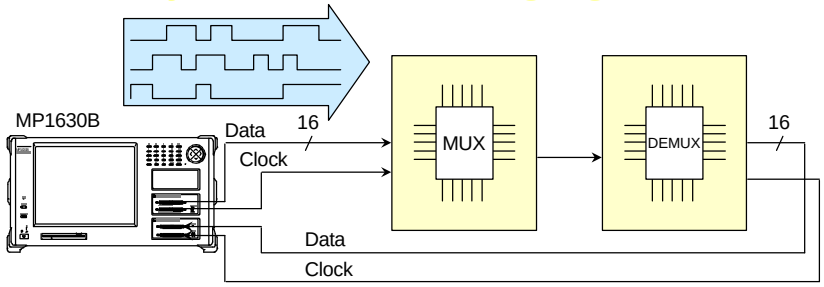
General / Communication Digital Devices

- Evaluation and Testing for Digital Communication ICs
  - MUX/DEMUX, Crosspoint Switch
  - Encoder/Decoder such as 8b/10b Converter
- Prototype Testing for FPGA, ASIC, DAC, High Speed RAM
- Reliable Testing for Recording Media Devices/Equipment (HDD, FDD, Optical Disk)
- Evaluation for CCD : Charge Couple Device
- Evaluation for High Speed Logic Board
- Crosstalk Evaluation for Future High Speed Bus

A full range of functions is provided for general digital devices.
The target pattern and level, data/clock phase, etc., can be set easily to simplify test evaluation.

Digital Devices (2)

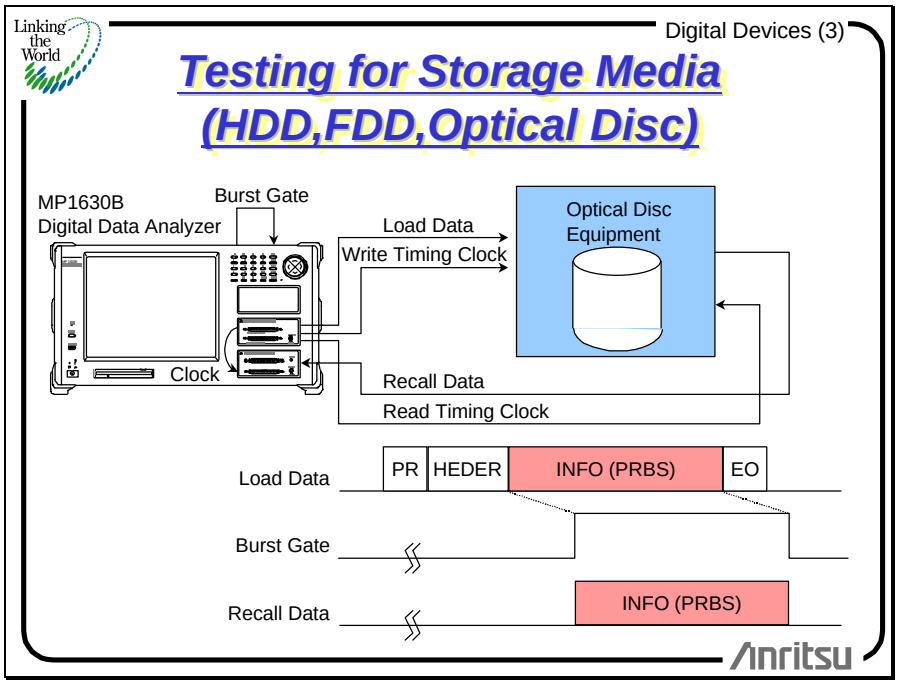
Many Functions for Testing Digital LSIs

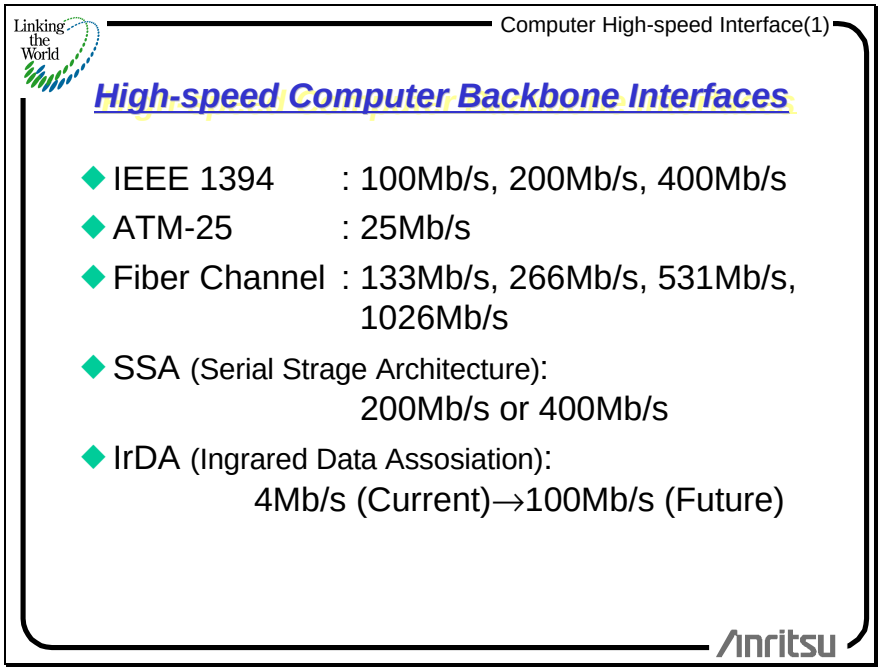


- Strong Pattern Editor (64K bit/ch)
- Output / Input
  TTL, ECL, PECL, LVTTL
  VAR (0.5V~5V/High,0.25~2.5V/50Ω)
- Delay
  PPG: Data, Clock(-5~+5ns)
  ED : Clock (-5~+5ns)

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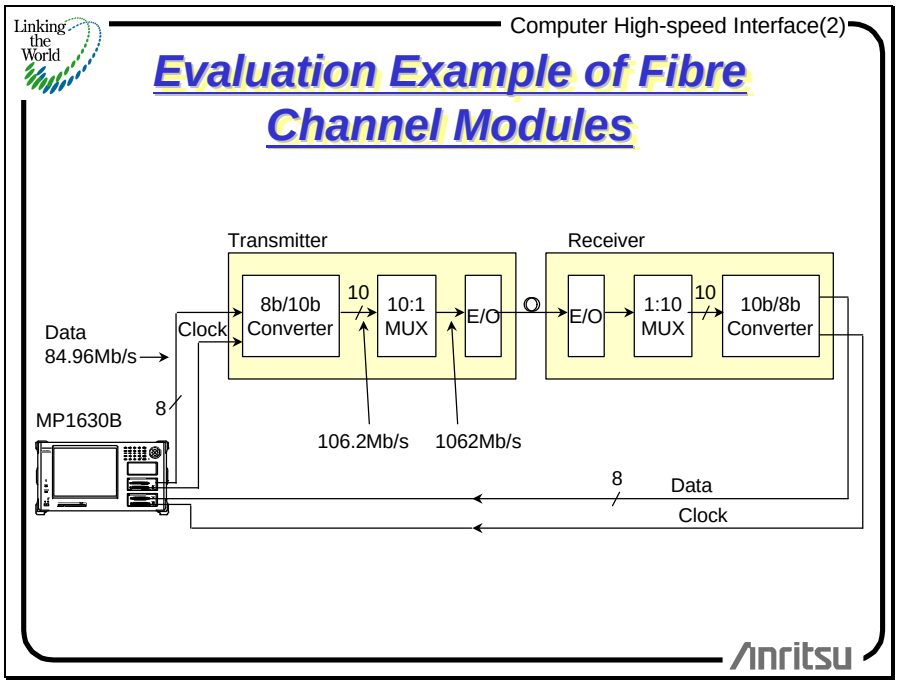
Framed patterns can be measured by using mixed patterns.



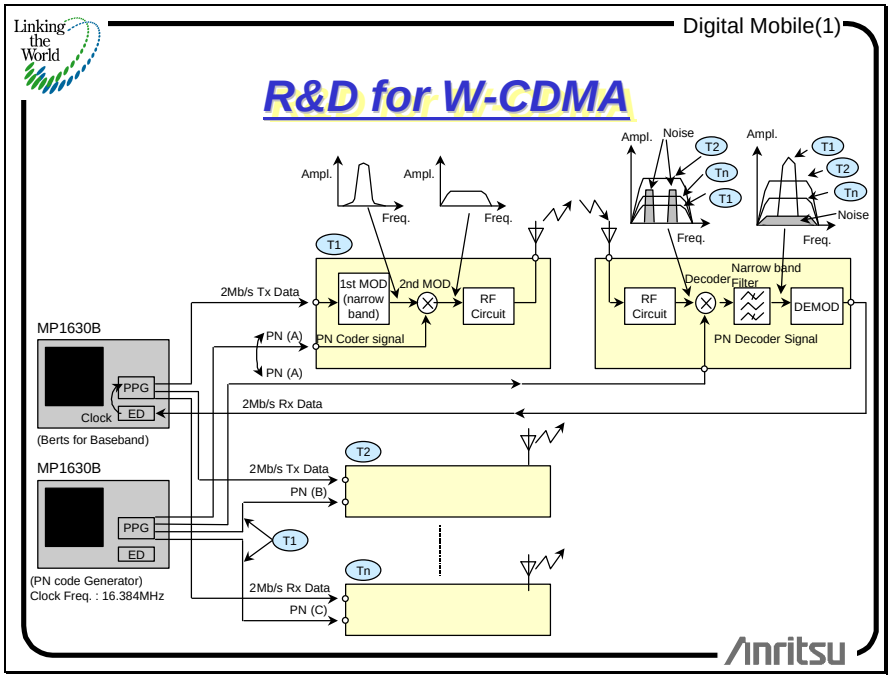


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The performance of the fibre channel MUX/DEMUX IC and 8b/10b converter can be tested using multi-channel signals.

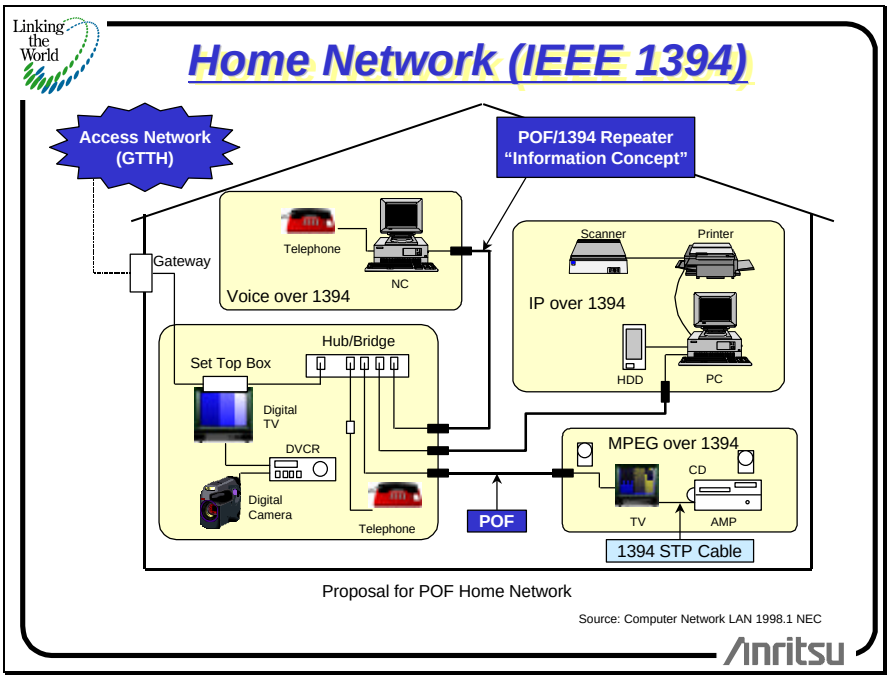


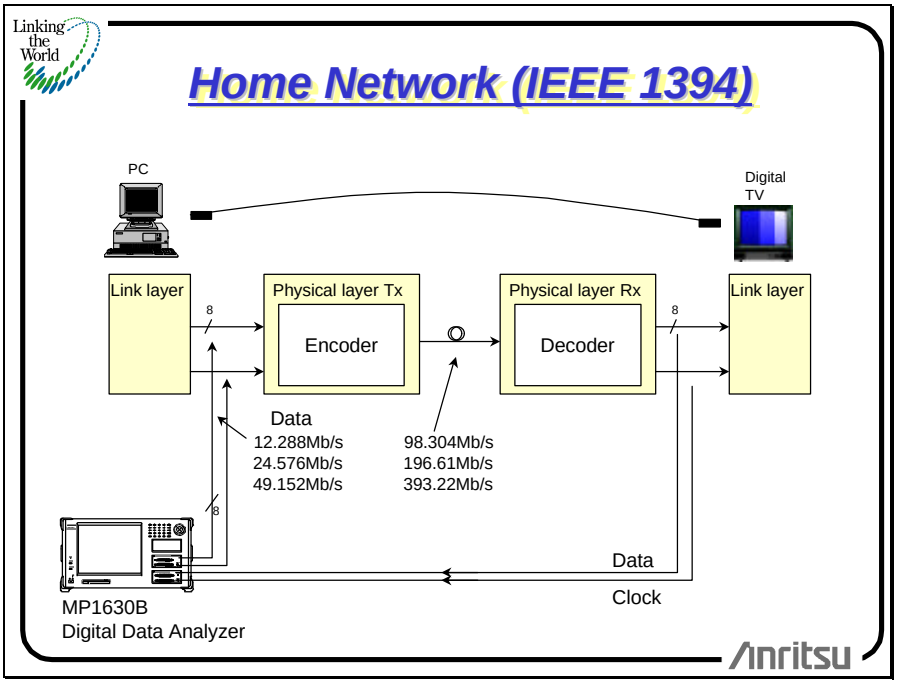
The MP1630B shows its impressive strengths in W-CDMA R&D such as verification of spread code strings by using multi-channels and a full range of built in PRBS and programmable patterns.



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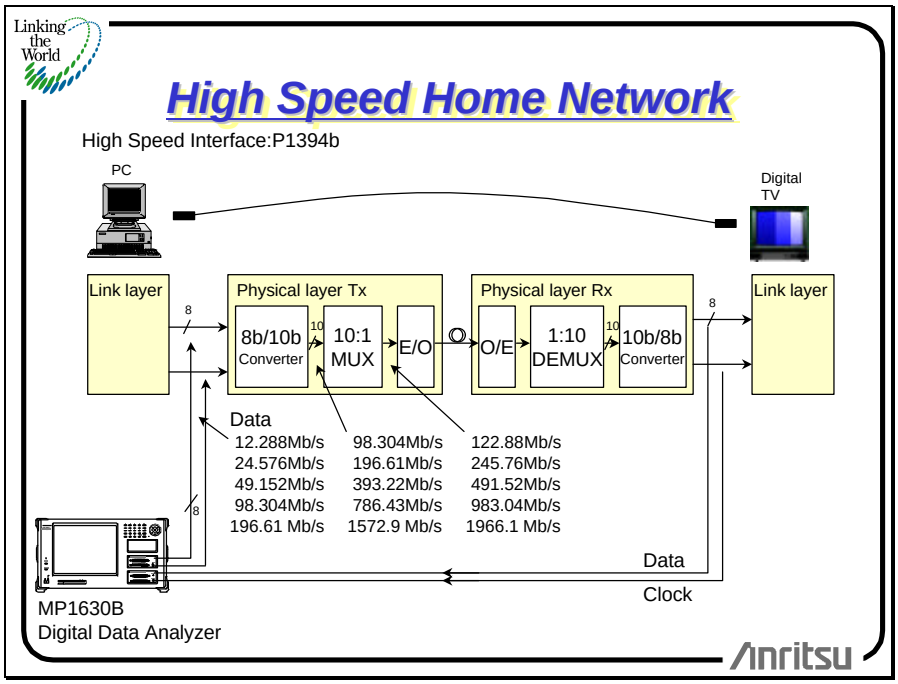
Due to increases in PC processing speed and digitization of AV equipment, even general households require unified high-speed interfaces for video, audio and data communications.





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The performance of the P1394b MUX/DEMUX ICs and 8b/10b converters can be tested using multi-channel signals.



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No. MP1630B-E-F-1-(1.00) 公知 Printed in Japan 1998-11 1AK

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