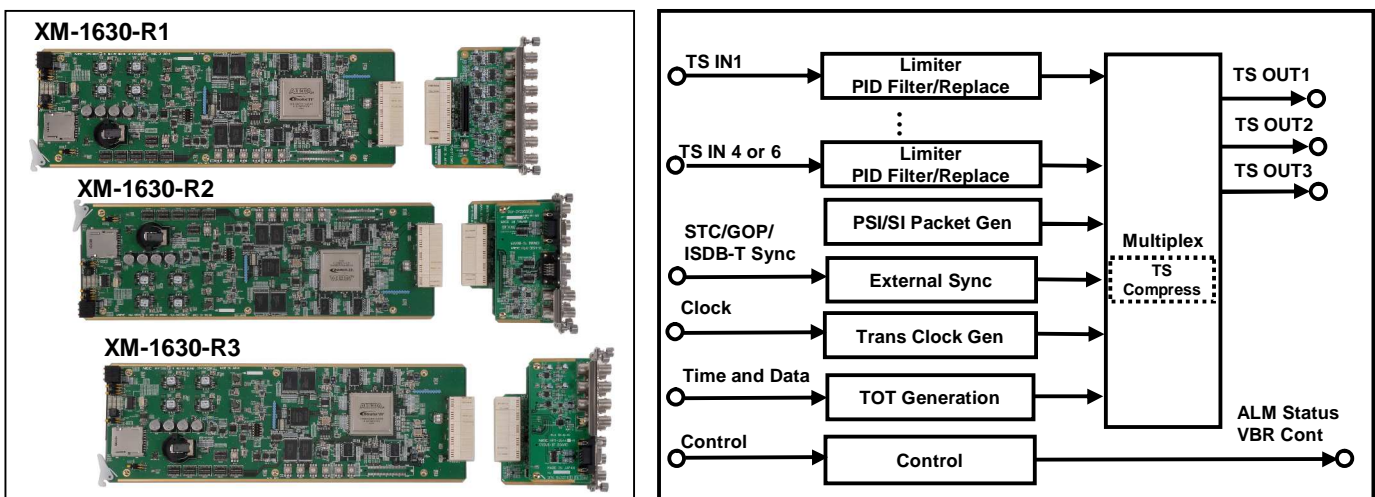


XM-1630

MPEG-2-TS Multiplexing Board

For Terrestrial Digital Broadcasting

The XM-1630 is a MPEG-2-TS multiplexing board which multiplexes various MPEG-2-TS signals from HDTV /SDTV/1SEG encoders, data broadcasting equipments, SI/EPG equipments, subtitle equipments and EMM/ECM equipments, to the ISDB-T frame structure format Broadcasting TS (BTS) signal. This board can be installed into the XF-730 frame and XF-712 frame.



Features

Input bitrate limiter

The packets which exceeded input bitrate limiter value don't affect the other ports so that it is rejected.

Input PID filtering and replacement

For each TS input port, the unit can filter out the undesigned PIDs and replace each input PID with a new one designated from the host controller.

PSI generation and multiplexing

The unit multiplexes not only the inputted PSI packets but also the generated PSI packets based on information from the host controller.

TOT generation and multiplexing

The unit generates TOT packets based on time and date information from an external clock equipment and multiplexes them together.

PCR generation and multiplexing

The unit generates PCR packets synchronized with an external STC sync signal and multiplexes them together.

Synchronizing with external signals

The unit synchronizes the transport clock, the STC value, the setting change timing and the ISDB-T frame phase with each external signal.

TS compression

The unit compresses the broadcasting TS (204 bytes) of 32.5 Mbps into the MPEG-2-TS (188 bytes) of 19.0 Mbps or less.

Custom support to the number of input TS signals, sync signals and control signals

By changing a rear board depending on application, you can change the number of the corresponding input TS signals, sync signal inputs and control signals.

NEC Corporation

<http://www.nec.com/global/prod/nw/broadcast/>

XM-1630 MPEG-2-TS Multiplexing Board for Terrestrial Digital Broadcasting

Specifications

Input signal	(1) Multiplexed data TS signal MPEG-2-TS, DVB-ASI	4 to 6 channels (*1)
Output signal	(1) Broadcasting TS signal or Compressed broadcasting TS signal MPEG-2-TS DVB-ASI	3 channels (*2)
Sync signal	(1) STC/GOP/ISDB-T frame sync signal MPEG-2-TS, DVB-ASI	1 channel (*3)
	(2) ISDB-T system clock signal or external 10 MHz clock signal 0.8 Vp-p/75 , Frequency ± 0.1 ppm	1 channel
	(3) 1 pps signal TTL/75	1 channel
	(4) Time and date information RS-485, BCD, Communication rate: 2400 bps, asynchronous (start-stop sync)	1 channel
Control signal	(1) VBR data multiplexing information RS-422	4 channels
Operation temperature	0 °C to 40 °C	
Power supply	85 to 264 V AC, 50/60 Hz single phase	
Power consumption	18 VA or less	
External dimensions	100(H) x 480(W) x 500(D) mm	
Weight	1 kg or less	

- *1 (1) Compliant with both burst mode (byte mode) and packet mode.
 (2) Supports both 188 byte format and 204 byte format (no RS error correction function.)
 (3) Supports up to 4 programs and 16 types of PIDs per port (individual and range assignment.)
 (4) The number of inputs: 4 ports for standard, able to increase it to max. 6 ports by changing a rear board.

- *2 (1) Compliant with both burst mode (byte mode) and packet mode.
 (2) Broadcasting TS signal of ISDB-T transmission scheme with the transmit control information (ISDB-T_information) and RS error correction code added.
 (3) Supports an output TS bitrate of 32.5 Mbps, 37.9 Mbps and 43.3 Mbps.
 (4) For the compressed broadcasting TS signal.

- *3 (1) Compliant with 188 byte format, packet mode.
 (2) Inputs the output signal of ISDB-T Sync Signal Generator (TS-G1630.)

XM-1630 Series

Model Name	Input/Output Signal (Number of Connectors)						
	Input					Output	
	TS IN	STC/GOP/ISDB-T Frame Sync	Clock	1PPS	Time and date Info	TS OUT	VBR Control Info
XM-1630-R1	4	-	-	-	-	3	-
XM-1630-R2	6	-	-	-	1	3	4
XM-1630-R3	4	1	1	1	1	3	-

Safety precautions	To install, make connections and operate this product, please carefully read and observe instructions, precautions and recommendations in our instruction manuals.
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The colours in this brochure may differ from those of the actual unit. Designs and specifications of this product is subject to change without prior notice.

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ISO 9000 Series

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