

## Outline

NDS3107G Tuner Input Multiplexer is the latest demodulation and multiplexing device for digital TV broadcasting head-end system with TS output through IP port. It can multiplex up to 16 channels Tuner and 2 ASI input to IP (MPTS). This multiplexer has the functions of supporting auto-generation of PSI/SI information, PID re-mapping, and service filtering.

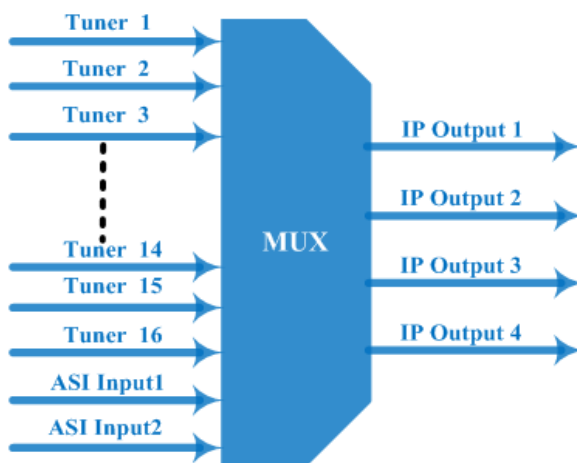
BISS function embedded will carefully descramble tuner input programs. In conclusion, its high integration and cost effective design make this device widely used in the CATV Broadcasting system.

## Key Features

- Support 16 FTA DVB-S/S2/S2X (DVB-C, DVB-T/(T), ISDB-T, ATSC optional )input, 2 ASI input
- Support BISS descrambling, and each channel bit rate cannot exceed 80Mbps
- Support DisEqc function
- 4 IP output (MPTS) over UDP, RTP/RTSP protocol
- 2 GE mirrored output, up to 850Mbps
- Support PID filtering, re-mapping
- Support PSI/SI rebuilding and editing

- Support “Null PKT Filter” function
- Support Web operation

## Working Principle



## Specifications

Input	16 tuners input, (DVB-C, DVB-T/(T), ISDBT, S/S2/S2X, ATSC optional), F type 2 ASI input, BNC interface			
Tuner Section		DVB-C	Input Frequency	30 ~1000 MHz
			Standard	J.83A(DVB-C), J.83B, J.83C
			Constellation	16/32/64/128/256 QAM
		DVB-T/(T)	Input Frequency	30 ~1000 MHz
			Bandwidth	6/7/8 M
	Version 1	DVB-S	Input Frequency	950~2150MHz
			Symbol rate	1~45 Msps
			FEC	1/2, 2/3, 3/4, 5/6, 7/8
			Constellation	QPSK
			Signal Strength	- 65~ -25dBm
			Max input bitrate	≤120 Mbps
		DVB-S2	Input Frequency	950~2150MHz
			Symbol rate	1~45 Msps
			FEC	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
			Constellation	QPSK, 8PSK
	Version 2 (New)	DVB-S	Input Frequency	950~2150MHz
			Symbol rate	0.5~45Msps
			Signal Strength	- 65- -25dBm
			FEC	1/2, 2/3, 3/4, 5/6, 7/8
			Constellation	QPSK
Max input bitrate			≤ 120 Mbps	
DVB-S2		Input Frequency	950~2150MHz	
		Symbol rate	QPSK/8PSK /16APSK :0.5~45 Msps 32APSK: 0.5~40Msps;	

			FEC	QPSK: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 16APSK: 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 32APSK: 3/4, 4/5, 5/6, 8/9, 9/10	
			Constellation	QPSK, 8PSK, 16APSK, 32APSK	
			Max input bitrate	≤120 Mbps	
	DVB-S2X			Input Frequency	950~2150MHz
				Symbol rate	QPSK/8PSK /16APSK :0.5~45 Msps 8APSK/32APSK: 0.5~40Msps
				FEC	QPSK: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10, 13/45, 9/20, 11/20 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 8APSK: 5/9-L, 26/45-L 16APSK: 2/3, 3/4, 4/5, 5/6, 8/9, 9/10, 1/2-L, 8/15-L, 5/9-L, 26/45, 3/5, 3/5-L, 28/45, 23/36 , 2/3-L, 25/36, 13/18, 7/9, 77/90 32APSK: 3/4, 4/5, 5/6, 8/9, 2/3-L, 32/45, 11/15, 7/9
				Constellation	QPSK, 8PSK, 8APSK, 16APSK, 32APSK
				Max input bitrate	≤120 Mbps
		ISDB-T		Input Frequency	30~1000MHz
		ATSC		Input Frequency	50 MHz~960MHz
Bandwidth				6M	
Constellation				8VSB	
<b>Re-multiplex</b>		PID re-mapping			
		PCR accurate adjusting			
		Automatic generating PSI/SI table			
<b>PID</b>	Output range	0x0000—0x1FFF			
	PID transparent	Any PID transparent and mapping achievable			
	Amount of output PID per input	128			
<b>BISS descrambling</b>		Mode 1, Mode E (Up to 850Mbps) (descramble individual program)			
<b>Output</b>		4 IP (MPTS) output over UDP and RTP/RTSP protocol through GE1 and GE2 port, Unicast and Multicast			
<b>System</b>	Remote management	Web-server Management			
	Language	English			
	Upgrade	USB, web management			
<b>Miscellaneous</b>	Dimension	482mm×410mm×44mm (W×L×H)			
	Approx weight	3.5kg			
	Environment	0~45℃(work); -20~80℃ (Storage)			
	Power requirements	100~240VAC, 50/60Hz			
	Power consumption	20W			

## Tuner Input Options:

● 8 DVB-C Tuners + 8 ATSC Tuners
● 8 DVB-S2/S2X Tuners + 8 DVB-(T) Tuners
● 8 DVB- S2/S2X Tuners + 8 ISDB-T Tuners
● 16 DVB-S/S2/S2X/DVB-C/(T) /ISDB-T/ATSC Tuners

*Updated Date: 17 May, 2019*