500DA2Q

Dual Reclocking Distribution Amplifier

The 500DA2Q Reclocking Distribution Amplifier provides the highest density DA in the industry allowing up to 32 SD distribution amplifiers in a 3RU rack space. It provides inexpensive distribution of your SMPTE 259M (143 to 360Mb/s), SMPTE 344M (540Mb/s), or SMPTE 310M (19.4Mb/s) signals. The 500DA2Q features two auto-equalized inputs and can be configured either as a single DA with eight re-clocked outputs or as two separate DAs with four outputs each.

In the case of dual operation, each DA can be individually set via jumpers for either SMPTE 259M/344M or SMPTE 310M reclocking.

The 500DA2Q is housed in the 3RU 500FR ***exponent*** frame that will hold up to 16 modules.

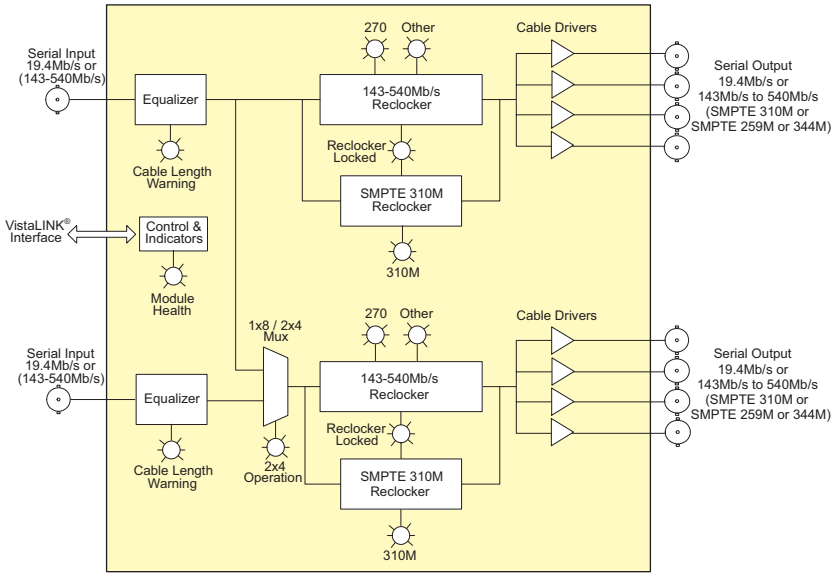
Features & Benefits

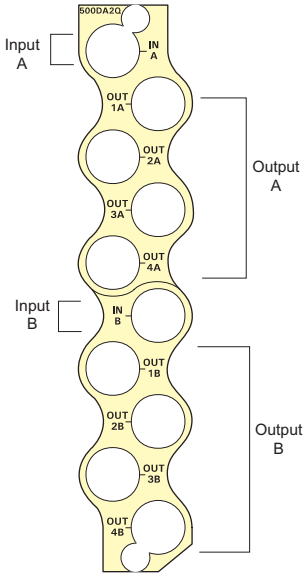
- Normal mode for SMPTE 259M (143-360Mb/s), SMPTE 344M (540Mb/s) or DVB-ASI signals - autodetects correct bit rate
- Jumper selectable mode for SMPTE 310M (19.4Mb/s) signals
- Configurable as 1 DA with 8 outputs or 2 DAs with 4 outputs each
- Fully hot-swappable from front of frame with no BNC disconnect required
- Independent isolated output drivers to ensure no cross channel loading effects (i.e. no need to terminate unused outputs)
- Module health and 2x4 Mode status LEDs
- Reclocker(s) Locked, Cable Length Warning and Video Standard LEDs for each DA channel
- Tally output on Frame Status bus upon loss of input signal
- VistaLINK® -capable for remote monitoring via SNMP (using VistaLINK® PRO) when installed in 500FR frame with 500FC VistaLINK® Frame Controller

Inputs
- 2 inputs
- SMPTE 259M (143 to 360Mb/s), SMPTE 344M (540Mb/s), DVB-ASI or SMPTE 310M (19.4Mb/s)
- Return loss > 15dB up to 540Mb/s
- 300m auto eq. at 270Mb/s (Belden 8281)
- 210m auto eq. at 540Mb/s (Belden 8281)

Outputs
- 4 reclocked outputs per input
- Return loss > 15dB up to 540Mb/s
- Jitter < 0.2 UI

Card Edge LEDs
- Module Health Status
- 2x4 mode operation
- Reclocker rate (detection)
- Reclocker Locked
- Max. Equalization Warning





Specifications

Serial Video Input:

Standards:	
Reclocked:	SMPTE 259M (143 to 360Mb/s) SMPTE 344M (540Mb/s), SMPTE 310M (19.4Mb/s) DVB-ASI
Non-reclocked:	Any SD signal in the143Mb/s to 540Mb/s range
Connectors:	2 BNC per IEC 61169-8 Annex A
Equalization:	Automatic to 400m @ 270Mb/s with Belden 1694A or equivalent cable (325m in mixed HD/SD frame applications)
Return Loss:	> 15dB up to 270Mb/s

Serial Video Output:

Number of Outputs(mode set by jumper):	
2x4 Mode:	4 reclocked from each input
1x8 Mode:	8 reclocked from Input A (1)
Connector:	BNC per IEC 61169-8 Annex A
Signal Level:	800mV nominal
DC Offset:	0V ±0.5V
Rise & Fall Time:	740ps nominal
Overshoot:	< 10% of amplitude
Return Loss:	> 15dB up to 270Mb/s
Jitter:	< 0.2 UI

Electrical:

Voltage:	+12V DC
Power:	6W
EMI/RFI:	Complies with FCC Part 15 Class A EU EMC Directive

Physical:

Number of slots:	1

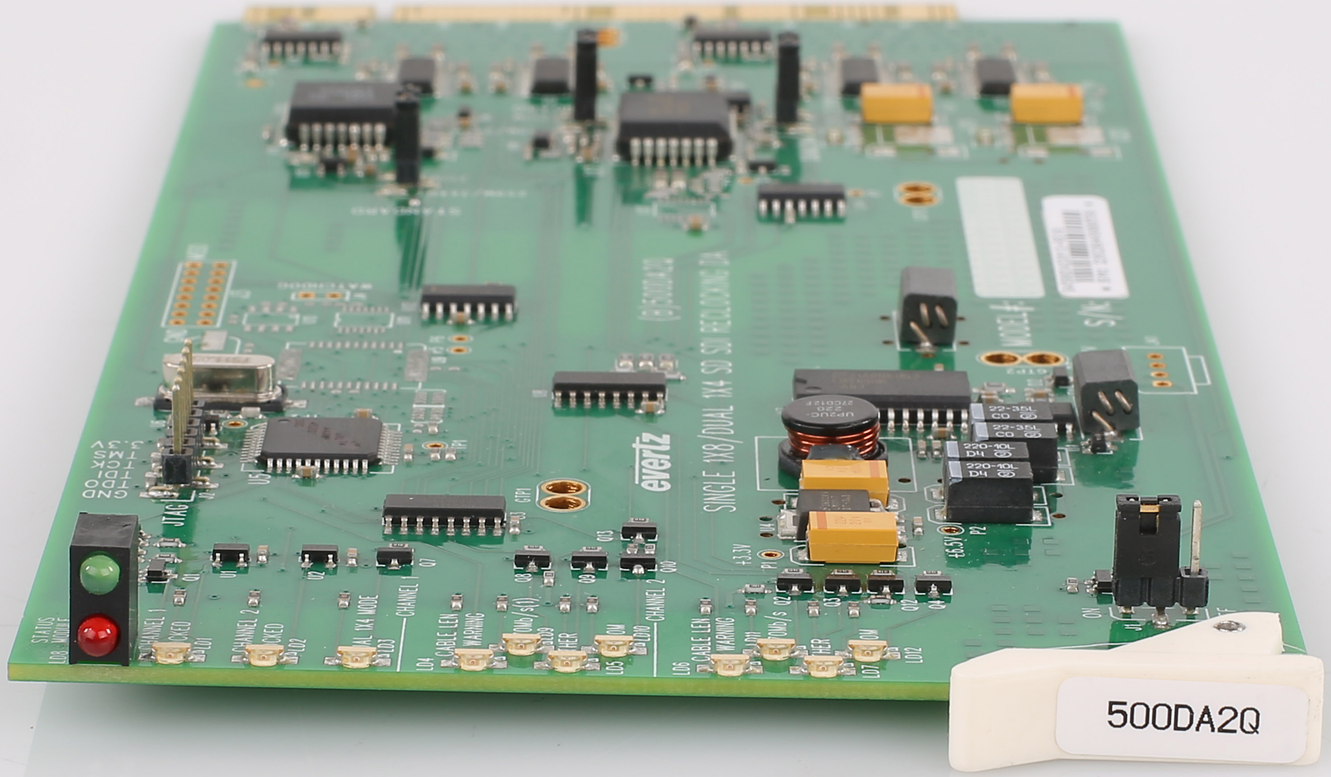
Ordering Information

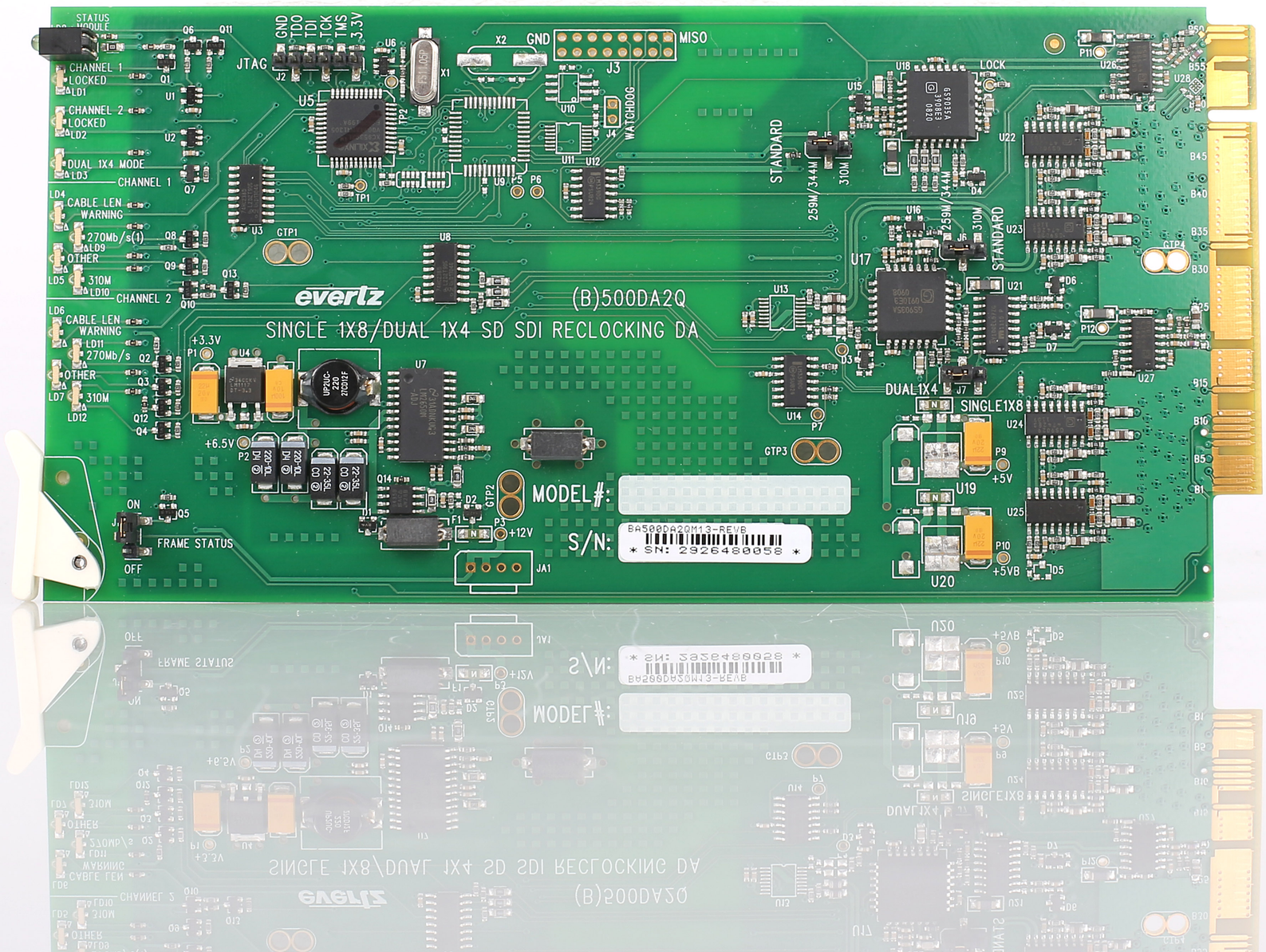
500DA2Q	Dual Reclocking Distribution Amplifier (2-1x4)

Enclosures	***exponent***
500FR	Compact High Density Distribution Frame
S501FR	Standalone enclosure

500DA2Q

WATCHDOG
STANDARD
259M/344M
310M
STANDARD
259M/34
310M
DUAL/QUAD
SINGLE/HD
+5V
+3.3V
P10
P9
P8
P4
P1
U20
U19
U21
U27
U28
U26
U25
U24
U23
U22
J5
J4
J3
J2
J1
LOCK
ACTIVE
B30
B35
B40
B45
B50
B55
B60
B65
B70
B75
B80
B85
B90
B95
B100


SINGLE 1X8/DUAL 1X4 SDI REGLOCKING DA
everlz
500DA2Q


STATUS
MODULE
CHANNEL 1
LOCKED
LD1
CHANNEL 2
LOCKED
LD2
DUAL 1X4 MODE
LD3
CHANNEL 1
LD4
CABLE LEN
WARNING
270Mb/s(1)
LD9
OTHER
LD5
310M
LD10
CHANNEL 2
LD6
CABLE LEN
WARNING
LD11
270Mb/s
OTHER
LD7
310M
LD12
JTAG
GND
TDO
TDI
TCK
TMS
3.3V
X2
GND
MISO
J3
WATCHDOG
LOCK
STANDARD
259M/344M
310M
STANDARD
259M/344M
310M
DUAL1X4
SINGLE1X8
+3.3V
+6.5V
+12V
+5V
+5VB
ON
OFF
FRAME STATUS
MODEL#:
S/N:
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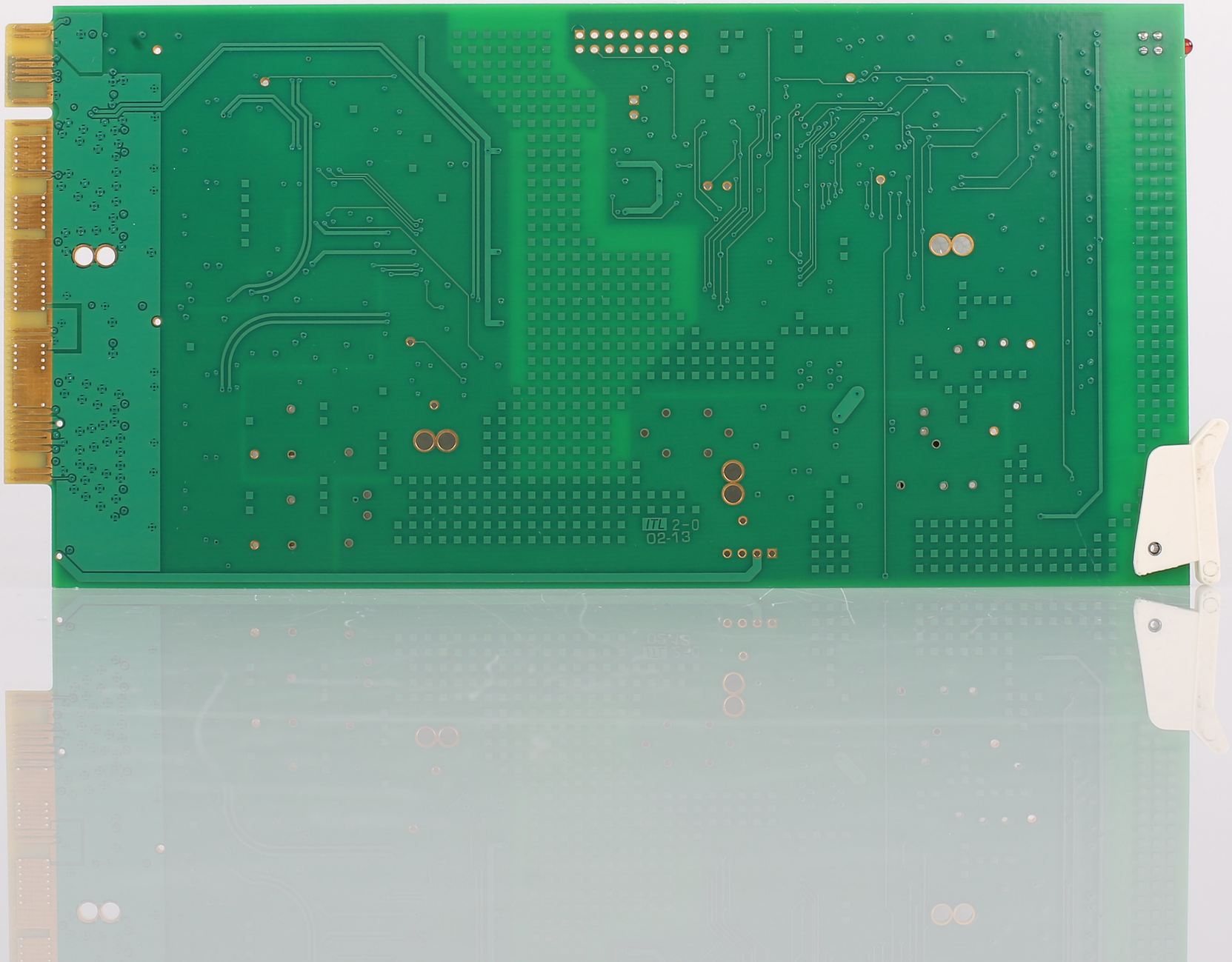
SN: 2926480058
evertz
(B)500DA2Q
SINGLE 1X8/DUAL 1X4 SD SDI RECLOCKING DA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