

TIDD / TIDDIF Analog Video Distribution Cards



- 6U VME hardware for analog video distribution
- TIDDIF external interface and TIDD signal copy and distribution
- Up to 8 input channels and 32 output channels



Interface

Type	6U VME Type
Serial	1x RS-485
Display	1x HDMI 1.4
Video	8ch D-sub input, 32ch D-sub output
USB	1x USB 3.0

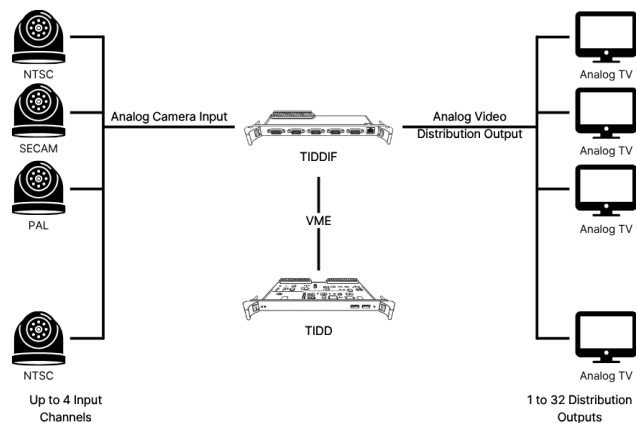
Processing

Video Format	NTSC / SECAM / PAL
Input Capacity	Up to 8 Simultaneous Channels
Output Capacity	Up to 32 Simultaneous Channels
Interface Card	TIDDIF External Signal Interface
Distribution Card	TIDD Signal Copy and Distribution
System Bus	VME Bus and Serial Communication
Processing	Dedicated FPGA Distribution Logic
Preview	Video Preview via HDMI Output

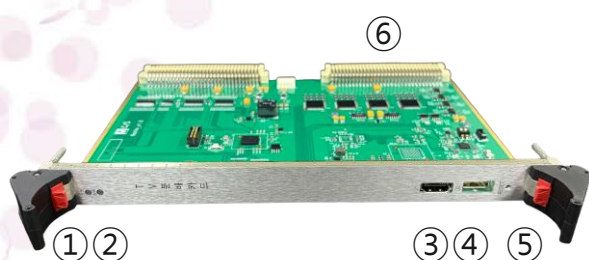
Specification

APU	ARM Cortex-A9 (dual-core) @ 2GHz + XILINK Artix-7 FPGA
Power Supply	5W

Application Diagram



I/O Layout



TIDD



TIDDIF

Port Description

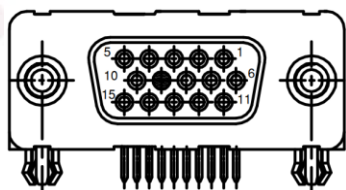
1	Status LED 1	Power status monitoring
2	Status LED 2	Device status monitoring
3	HDMI Port	Camera video preview
4	USB Port	Camera connection monitoring via UART
5	Reset Button	Device reset

6	VME Connector	VME communication interface
7	D-sub Port(26)	Analog video input (RS-485)
8	D-sub Port(15)	Analog video output
9	VME Connector	VME communication interface

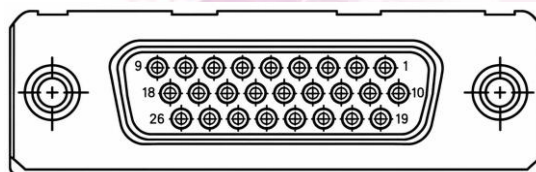
Serial Pin Map



TIDDIF



D-sub Port (15)

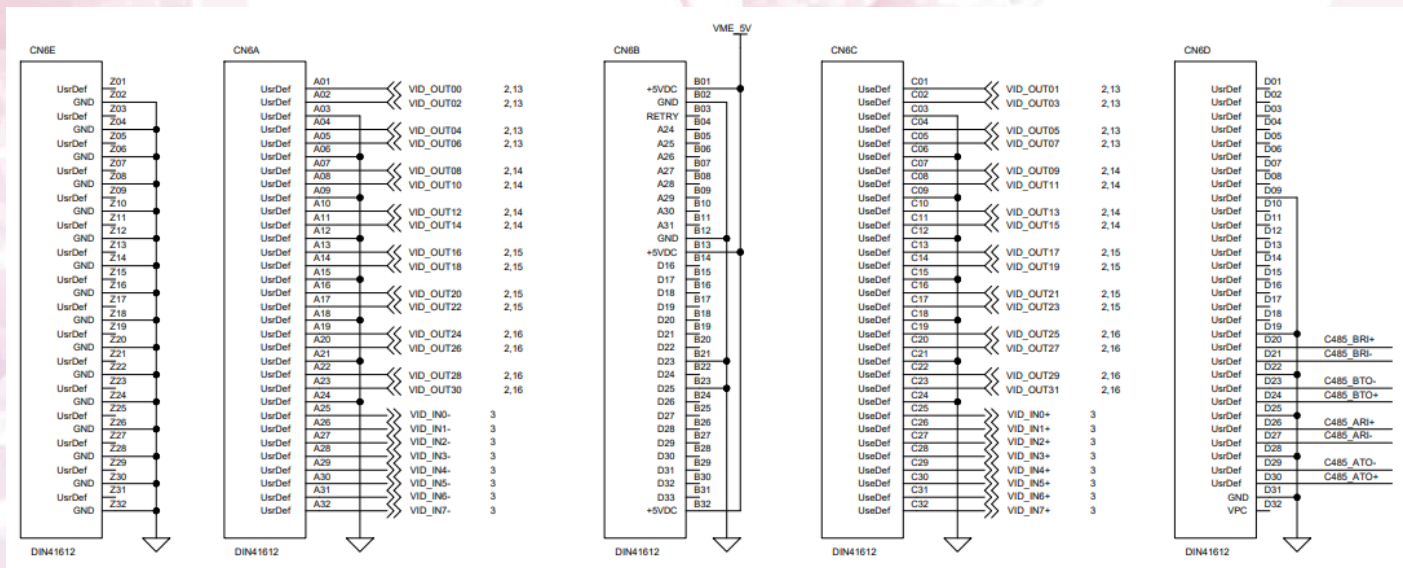


D-sub Port (26)

Pin	Signal	Notes
1~4	Video output (J1 : 0, 2, 4, 6) Video output (J2 : 8, 10, 12, 14) Video output (J3 : 16, 18, 20, 22) Video output (J4 : 24, 26, 28, 30)	
5	X	
6~9	GND	
10	X	
11~14	Video output (J1 : 1, 3, 5, 7) Video output (J2 : 9, 11, 13, 15) Video output (J3 : 17, 19, 21, 23) Video output (J4 : 25, 27, 29, 31)	
15	X	

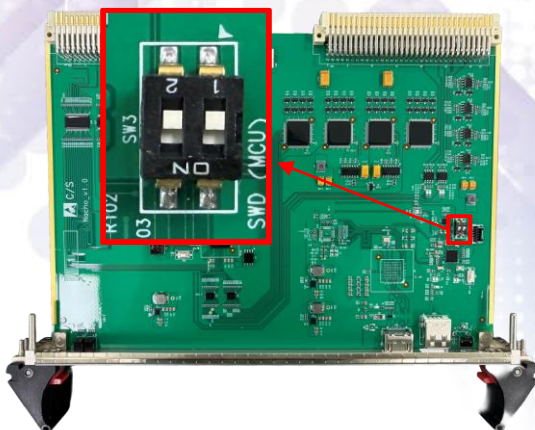
Pin	Signal	Notes
1~8	Video input 0- ~7-	
9	GND	
10	RS-485 RI+	A
11	RS-485 RI-	A
12	RS-485 TO-	A
13	RS-485 TO+	A
14	GND	
15	RS-485 RI+	B
16	RS-485 RI-	B
17	RS-485 TO-	B
18	RS-485 TO+	B
19~26	Video input 0+ ~ 7+	

VME Pin Map



VME Address Configuration

A20 A21



A23	A22	A21(1)	A20(2)	Base Address
OFF(1)	OFF(1)	OFF(1)	OFF(1)	0x00F00000(Default)
OFF(1)	OFF(1)	OFF(1)	ON(0)	0x00E00000
OFF(1)	OFF(1)	ON(0)	OFF(1)	0x00D00000
OFF(1)	OFF(1)	ON(0)	ON(0)	0x00C00000