# Event Master Devices



User's Guide E2 VPU to S3 VPU Conversion



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### **1. INTRODUCTION**

#### Overview

- About this guide
- Ordering the E2 VPU to S3 VPU conversion kit

#### 1.1 About this guide

#### General

Event Master E2 processors shipped between December 2014 and mid-2015 have a ninth VPU card in Slot #19. E2 processors do not require this ninth card, so the card may be removed and installed in an EX or an S3 Jr. unit to add video processing capabilities to that unit.

- 1. Determine whether or not a particular E2 processor has a ninth VPU card. Follow the procedures in "Web app dashboard", page 3.
- Remove the VPU card from Slot #19 of the E2 processor. Follow the procedures in "How to remove a VPU card", page 4 to remove this card.
- Convert the VPU card from an E2 configuration to an S3 configuration. Follow the procedures in "E2 configuration to S3 configuration VPU conversion", page 5.
- 4. Install the converted VPU card in an EX or an S3 Jr. unit. Follow the procedures in "Install the converted VPU card", page 7.

#### 1.2 Ordering the E2 VPU to S3 VPU conversion kit

#### Contact your local Barco representative

If your E2 processor has a ninth VPU, and you wish to remove that card and install it in an EX or an S3 Jr. unit, you will need an E2 VPU to S3 VPU conversion kit. The part number for this kit is R767294K. Please contact your local Barco representative to order the conversion kit.

## 2. IDENTIFICATION, REMOVAL, CONVERSION, AND INSTALLATION PROCEDURES

#### Overview

- Web app dashboard
- How to remove a VPU card
- E2 configuration to S3 configuration VPU conversion
- Install the converted VPU card

#### 2.1 Web app dashboard

#### General

Use the Web App Dashboard, in the Settings menu, to determine whether or not a particular E2 processor has a ninth VPU card.

- 1. Go to the Settings menu.
- 2. Select Dashboard.
- 3. Select the Other tab.

				🌣 Settings 🕂 System1 🔹		
ക	Options Controller Devices	Status: Online Q				
ø	Name System	-	2	E2 Web App		● About
		Be Dashboard ✓ Tools ✓ Tools	Dashboard a guick glance o Input Output Expansion System / Mainboard	✓ Run Full Diagnostic		
			SLOT ID	CARD TYPE	CARD STATUS	ACTIONS
	Ŷ	Contact Us	NA	System	Ready	✓ Run Diagnostic
		Follow Us	VPU			
			SLOT ID	CARD TYPE	CARD STATUS	ACTIONS
			15	VPU Scaler	Ready	✓ Run Diagnostic
			16	VPU Scaler	Reasy	✓ Run Diagnostic
			17	VPU Scaler	Ready	✓ Run Diagnostic
			18	VPU Scaler	Ready	✓ Run Diagnostic
			19	Unknown	Not installed	✓ Run Diagnostic
			20	VPU Scaler	Ready	✓ Run Diagnostic
			21	VPU Scaler	Ready	✓ Run Diagnostic
			22	VPU Scaler	Ready	✓ Run Diagnostic
8			23	VPU Scaler	Ready	✓ Run Diagnostic
**						1 + Window

Image 2-1

Web app dashboard – Other tab

If the processor has no VPU card in Slot #19, the Card Type for that slot reads "Unknown," and the Card Status reads "Not Installed." If the processor has a VPU card in Slot #19, the Card Type for that slot reads "VPU Scaler," and the Card Status reads "Ready."

t Outp	Expansion	Other	✓ Run Full Diagnosti	C Input O	utput Expansion	Other	✓ Run Full Diag		
System	/ Mainboar	d		Syste	System / Mainboard				
SLOT ID	CARD TYPE	CARD STATUS	ACTIONS	SLOT ID	CARD TYPE	CARD STATUS	ACTIONS		
NA	System	Ready	✓ Run Diagnostic	NA	System	Ready	✓ Run Diagnostic		
IPU				VPU					
SLOT ID	CARD TYPE	CARD STATUS	ACTIONS	SLOT ID	CARD TYPE	CARD STATUS	ACTIONS		
15	VPU Scaler	Ready	✓ Run Diagnostic	15	VPU Scaler	Ready	✓ Run Diagnostic		
16	VPU Scaler	Ready	✓ Run Diagnostic	16	VPU Scaler	Ready	✓ Run Diagnostic		
17	VPU Scaler	Ready	✓ Run Diagnostic	17	VPU Scaler	Ready	✓ Run Diagnostic		
18	VPU Scaler	Ready	✓ Run Diagnostic	18	VPU Scaler	Ready	✓ Run Diagnostic		
19	Unknown	Not Installed	✓ Run Diagnostic	19	VPU Scaler	Ready	✓ Run Diagnostic		
20	VPU Scaler	Ready	✓ Run Diagnostic	20	VPU Scaler	Ready	✓ Run Diagnostic		
21	VPU Scaler	Ready	✓ Run Diagnostic	21	VPU Scaler	Ready	✓ Run Diagnostic		
22	VPU Scaler	Ready	✓ Run Diagnostic	22	VPU Scaler	Ready	✓ Run Diagnostic		
23	VPU Scaler	Ready	✓ Run Diagnostic	23	VPU Scaler	Ready	✓ Run Diagnostic		

Slot #19 – Empty

Slot #19 – with VPU card

#### 2.2 How to remove a VPU card

#### **Necessary tools**

- 1x Phillips Screwdriver #2 (optional)
- 1x 7/64" hex screw driver (to remove the front cover, included with the product as packaged)

#### VPU card removal



The E2 processor has 9 VPU slots. The first slot on the left is Slot #15; the left-most slot on the right is Slot #19; and the right-most slot on the right is Slot #23.

1. Remove the front-cover assembly, the front brackets, the EMI filter (if present), the 3RU-fan tray, and the 1RU-fan tray. Refer to Sections 14.6 through 14.9 in the *Event Master Devices User's Guide* (R5905948).

2. Locate the VPU card in Slot #19.



#### Image 2-4 VPU Cards in an E2 chassis

- 1 Chassis
- 1 Chassis 2 VPU cards
- 3 VPU card in Slot #19
- 3. Loosen and unscrew the thumbscrew that holds the VPU card in Slot #19 in the chassis.
- 4. Pull the VPU card out of its slot, and set it aside.
- 5. Restore the 1RU-fan tray, the 3RU-fan tray, the front brackets, and the front-cover assembly. Refer to Sections 14.6 through 14.9 in the *Event Master Devices User's Guide* (R5905948).

### 2.3 E2 configuration to S3 configuration VPU conversion





The open end of the fansink faces the connector.

#### **Necessary tools**

- 1x Phillips Screwdriver #2
- 1x Small fine-nose pliers

#### Remove the VPU card from the E2 VPU card mount

- 1. Remove the 5 screws that secure the VPU card to the E2 VPU card mount.
- 2. Separate the VPU card from the mount.

#### Remove the VPU card Heatsink Fan

- 1. After you remove the card from the chassis, unplug the heatsink fan power wire from the PCB connector.
- 2. Locate the two pins that are located on opposite corners of the Heatsink and secure the fan on to the board.
- 3. Turn the board over and with small fine nose pliers while bringing together the two sides of the pin push it through the hole.
- 4. After both pins are pushed through the holes, you can remove the heatsink from the card.



Image 2-6 VPU card: S3 configuration components

- S3 VPU card mount 1
- 2 VPU card
- Heatsink fan 3 4 Heatsink fan pins (x2)
- Set screws (x5) Open end of the heatsink fan 5 6

#### Attach the VPU card Heatsink Fan

- Align the VPU fansink over the VPU card so that the push pin holes in the fansink correspond with the push pin holes in the 1. VPU card and the open end of the fansink faces away from the connector.
- 2. Push the fansink push pins in, so that the tops of the pins are flush with the top of the fansink.

#### Attach the VPU card to the S3 VPU card mount

- 1. Set the VPU card on the S3 VPU card mount, aligning the five screw holes on the card with the holes on the mount.
- 2. Secure the VPU card to the S3 VPU card mount with the five set screws provided in the conversion kit.



- Image 2-7 VPU card: S3 configuration
- VPU card Machine screws (x5) 1 2
- 3
- Connector Heatsink fan 4
- 5
- 6 7
- Open end of the heatsink fan Heatsink fan pins (x2) S3 VPU card mount Heatsink fan power connector 8



The open end of the fansink faces away from the connector.

#### 2.4 Install the converted VPU card

#### General

An S3-configured VPU card can be installed in an EX expansion box or in an S3 Jr. processor to add or expand video processing capabilities to that unit.

#### Installing a VPU card in an EX expansion box

A VPU card may be installed in either Slot #1 or Slot #2 of an EX expansion box. Refer to Section 16.4 in the Event Master Devices User's Guide (R5905948) for more details on removing and installing Event Master cards in an EX expansion box.



Image 2-8 EX Chassis: Event Master card location

- Card slot #1 1
- Card slot #2 Card thumbscrews 23

#### Installing a VPU card in an EX expansion box

- 1. Locate the card slot in which you wish to install the VPU card.
- 2. Loosen the left and right thumbscrews that hold the existing card (or the cover plate of an unpopulated slot) in the chassis.
- 3. Grasp the thumbscrews, and gently pull the card out of the slot. You may need to wobble the card a bit to loosen it from the mating connector as you pull it out.
- Slide the VPU card into the open slot. 4.
- 5. Tighten the left and right thumbscrews that hold the card in the chassis.

#### Installing a VPU card in an S3 Jr. processor

A VPU card may be installed in either Slot #2 or Slot #3 of an S3 Jr. processor. Refer to Section 15.4 in the Event Master Devices User's Guide (R5905948) for more details on removing and installing Event Master cards in an S3-4K processor.



Image 2-9

- S3 Jr. Chassis: Event Master VPU card location
- Chassis
- Event Master VPU card (Slot #2) Event Master VPU card (Slot #3) 2 3
- 4 VPU card thumbscrews

#### Installing a VPU card in an S3 processor

- Locate the card slot in which you wish to install the VPU card. A VPU card can be installed in either Slot #2 or Slot #3.
- 2. Loosen the top and bottom thumbscrews that hold the cover plate of an unpopulated slot in the chassis.
- 3. Grasp the thumbscrews, and the cover plate from the slot.
- 4. Slide the VPU card into the open slot.
- 5. Tighten the top and bottom thumbscrews that hold the card in the chassis.