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Emulator to Target Adapters and Accessories

The capital letters in the chart below correspond to the pictures below the chart. The photos below may not be exactly as illustrated.

Note: Flex cables are available. Please see the "Extender Flex Cable Assemblies" section in this price list. You can use the flex cables with all the adapters.

Adapter Summary - Use this chart to select the correct adapter

MCU	F167, F168 and F269		R172 and R272		Infineon C161	
Adapters for kitCON 16x	EMUL166-PC/ADP-EVAL-167CR		A solder-down adapter has to be used.		EMUL166-PC/ADP-EVAL-161 O/V/K	
	See photo C				See photo C	

MCU	F167, F168 and F269		R172 and R272		Infineon C161	
Solder- Down Adapters	ET/AS-C167-QF10S-NOH	715	ET/R163/C165-QF49S-NOH	525	ET/AS-C161-QF14S-NOH	565
	144 Pin. See photo A		100 Pin. See photo A		80 Pin. See photo A	
	ET/AS-C167-QF10S-YAM-NOH	715	ET/R163/C165-QF49YAM-NOH	620	ET/AS-C161-QF14YAM-NOH	540
	144 Pin. See photo B		100 Pin. See photo B		80 Pin. See photo B	
Replacement Socket	ET/EPP-144-QF10-SM	515	ET/EPP-100-QF49-SM	515	ET/EPP-080-QF14A-SM	
	144 Pin. See photo A		100 Pin. See photo A		80 Pin. See photo A	

A
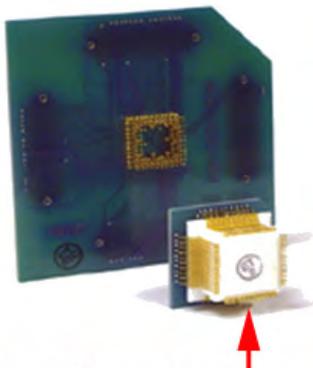
The Solder-down Base is made by Emulation Technology

B
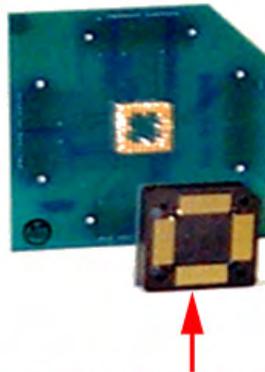
The base screws onto a Yamaichi socket that is soldered onto your target board

C This adapter can be with direct connect headers mounted on the target board

This adapter is used to connect the EMULST10 Emulator to the PHYTEC ST10 Evaluation Boards

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Emulator to Target Adapters and Accessories (Continued)

F167, F168 and F269

|		
144-pin adapter for the F167/168/ 269	A 144-pin adapter with 4*40-pin connectors (female) on both sides. It fits between the pod bottom connectors and the target. It is used by F167,F168, and F269 target boards and Phytec kitCON ST10 board. (See picture **C** on page 15.)	**EMUL166-PC/ADP-EVAL-167CR**
144-pin adapter for the F167/168/269 (square)	A 144-pin MQFP adapter for the square F167, F168, F269 and C167 /CR/SR. The bottom adapter solders to the user board. Additional solder-down base is available, part number ET/EPP-144-QF10-SM. (See picture **A** on page 15.)	**ET / AS-C167-QF10S-NOH**
Replacement solder-down adapter	A replacement 144-pin MQFP solder-down adapter for the ET/AS-C167-QF10S-NOH, listed above.	**ET / EPP-144-QF10-SM**
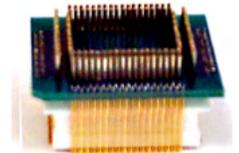
144-pin Yamaichi adapter (square)	A 144-pin MQFP adapter for the square F167, F168 and F269. The bottom portion of this adapter screws down to the top of the Yamaichi 144-pin socket (the solder-down adapter IC149-144-K11453-05 is not included. It can be purchased through Adapters.com). The top board connects to the bottom of the pod. (See picture **B** on page 15.)	**ET / AS-C167-QF10S-YAM-NOH**
Clip-over probe	A clipover Delta Probe for the STMicroelectronics ST10 144-pin microcontrollers such as F167, F168 and F269.	**EMUL166-PC/ADP-144PIN-DELTA**
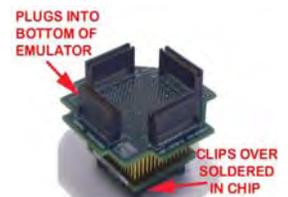
*Denotes new item since the last list.   800.686.6428 - www.icetech.com

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Emulator to Target Adapters and Accessories (Continued)

R172 and R272

100-pin adapter for the 163 and 165 (square)	A 100-pin TQFP adapter for the R172, R272 and the square Infineon 163 and 165. The bottom portion solders to the user board. Additional solder-down base is available, part number ET/EPP-100-QF49-SM. (See picture **A** on Page 12.)	525.00	**ET / R163/C165-QF49S-NOH**
Replacement solder-down adapter	A replacement 100-pin TQFP solder-down adapter for the ET/R163/C165-QF49S-NOH, listed above.		**ET / EPP-100-QF49-SM**

ET / R163 / C165-QF49YAM-NOH

100-pin adapter for the 163 and 165 Yamaichi (square) — A 100-pin TQFP adapter for the R172, R272 and the square Infineon 163 and 165. The bottom portion of this adapter screws down to the top of the Yamaichi 100-pin socket (solder-down adapter IC149-100-014-S5 is not included, it can be purchased through Adapters.com). The top board connects to the bottom of the pod. (See picture **B** on Page 15.)
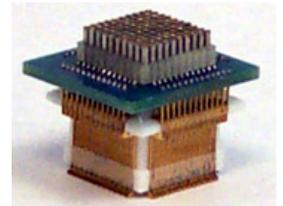
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Emulator to Target Adapters and Accessories (Continued)

Infineon C161

|		
C161 O/V/K Phytec kitCON Adapter	This adapter fits between the pod bottom connectors and the target. It is used by C161 O/V/K target boards and Phytec kitCON C161 board. (See picture **C** on Page 15.)	**EMUL166-PC/ADP-EVAL-161 O/V/K**
80-pin adapter for the C161 (square)	An 80-pin MQFP adapter for the square C161. The bottom portion solders to the user board. An additional solder-down base is available: part number ET/EPP-080-QF14A-SM. (See picture **A** on Page 15.)	**ET / AS-C161-QF14S-NOH**
Replacement solder-down adapter	A replacement 80-pin MQFP solder-down adapter for the ET/AS-C161-QF14S-NOH, listed above.	**ET / EPP-080-QF14A-SM**
80-pin adapter for the C161 V/K/O	An 80-pin MQFP adapter for the square C161 V/K/O. The bottom portion of this adapter screws down to the top of the Yamaichi 80-pin socket (solder-down adapter IC149-080-017-B5 is not included, it can be purchased through Adapters.com). The top board connects to the bottom of the pod. (See picture **B** on Page 15.)	**ET / AS-C161-QF14YAM-NOH**
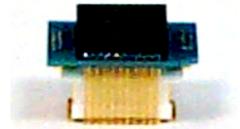
Isolator/Extender Cards

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Isolator / extender for all ST10 pods	Isolator/extender for all ST10 pods. Adds about 1" of clearance between pod and target and has jumpers allowing individual isolation of each pin to the target. Pin-out drawings of the isolator/extender cards are available on Nohau's website: www.nohau.com.	**ISO166/ST10-EXT**
3V Adapter / Isolator	This new mezzanine board inserts between the emulator and the target adapter to provide 3 volt target operation. Currently this supports any 3 volt parts but will support all future ST10 3 volt versions. There are jumpers to allow any parallel port to be disconnected from the target. They are not bit selectable.	**EMUL166-PC-ADP-3V**
Socket adapter	A PQFP socket adapter, base solders down into 144-pin QFP AMP production socket footprint.	**EMUL-PC/ADP-PGA144**
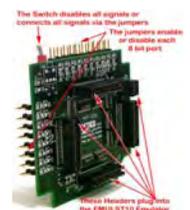
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Extender Flex Cable Assemblies
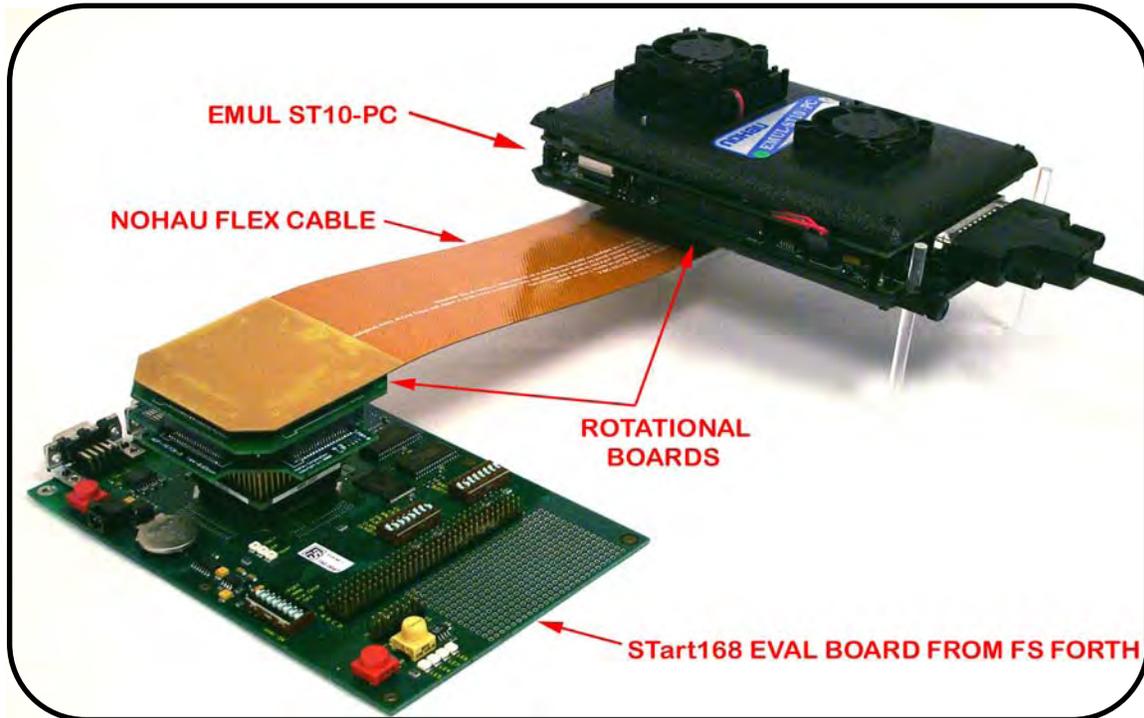
Nohau 10-inch flex cable	A 10-inch flex cable used to extend an adapter away from the emulator board. This flex cable is made by Nohau and is a 50 ohm transmission line that works at speeds in excess of 100 MHz. Requires a rotational board pair (EMUL/ADP/FLEX-ST10/166-RB) for connection at each end. The combined assembly is inserted between the emulator and the target adapter. By rotating these boards, the cable can approach the target from any of four quadrants providing access no matter what the hardware configuration.	**EMUL / ADP / FLEX-UNIV**
Rotational boards	Set of two rotational boards to use with the flex cable to extend the adapter away from the emulator. One of the boards fit between the pod and flex cable, and the other board fits between the flex cable and the target adapter. Rotational boards for other microcontroller families are available through Nohau. Mechanical specifications are available for the custom rotational boards.	**EMUL / ADP / FLEX-ST10/166-RB**

* For information on purchasing the STart168 EVAL board, if in the USA please contact: Embedded Solutions, phone: 1 888-546-9741, Web: www.es-usa.com.

If you are outside the USA please contact: FS FORTH-SYSTEME GmbH Germany PO Box: 1103 D-79200 Breisach, Address: Kueferstrasse 8 D-79206 Breisach, Phone: ++49 7667 908-0 Fax: ++49 7667 908-200, Email: sales@fsforth.de.