Approved Firewire chipsets for Firestudio family interfaces & StudioLive mixers Release date: Oct 2, 2012

PreSonus FireStudio Family interfaces and StudioLive mixers work with a wide range of FireWire cards and configurations. Due to the plethora of FireWire chipsets currently on the market, it is not possible to thoroughly test each one for compatibility. Most users will not need to alter their current PC configuration to use their FireStudio family interface.

Please note: This document supersedes previous compatibility documents released by PreSonus both on our website and in our user manuals. Many manufacturers have changed their chipset designs. This document reflects those changes.

The following FireWire chipsets are available on a wide range of motherboards and FireWire adapter cards:

Manufacturer	Chipset	Configuration Type
LSI (Agere)	FW321	PCI, Laptop Mainboard
LSI (Agere)	FW322	PCI, Laptop Mainboard
LSI (Agere)	FW323	PCI, Laptop Mainboard
LSI (Agere)	FW643	PCI Express, ExpressCard 34, Motherboard, Laptop
Texas Instruments (TI)	TSB43AB21A	PCI, Cardbus, Motherboard
Texas Instruments (TI)	TSB43AA22	PCI, Cardbus, Motherboard
Texas Instruments (TI)	TSB43AB22	PCI, Cardbus, Motherboard
Texas Instruments (TI)	TSB43AB22A	PCI, Cardbus, Motherboard
Texas Instruments (TI)	TSB43AB23	PCI, Cardbus, Motherboard
	TI TSB82AA2 +	
Texas Instruments (TI)	TI TSB81BA3	PCI, Cardbus, Motherboard
Texas Instruments (TI)	TSB82AA2B	PCI, Cardbus, Motherboard
Texas Instruments (TI)	TSB83AA22A	PCI, Cardbus, Mainboard
Texas Instruments (TI)	TSB83AA23	PCI, Cardbus, Motherboard
Texas Instruments (TI)	XIO2200	PCI Express, ExpressCard 34, ExpressCard 54, Motherboard
Texas Instruments (TI)	XIO2200A	PCI Express, ExpressCard 34, ExpressCard 54, Motherboard
Texas Instruments (TI)	XIO2213	PCI Express, ExpressCard 34, ExpressCard 54, Motherboard
Texas Instruments (TI)	XIO2213B	PCI Express, ExpressCard 34, ExpressCard 54, Motherboard
VIA	VT6315/VT6330	PCI Express, ExpressCard   34, ExpressCard   54, Motherboard

Here is a list of manufacturers and models of PCI, PCI Express (PCI-e), ExpressCard|34, ExpressCard|54 and PCMCIA FireWire cards using approved FireWire chipsets that were tested by the PreSonus QA Team:

Vendor	Format	Part #	1394b	1394a	1394 Chipset	Notes
Aaxeon	PCIe x1 Card	FWB-68300	4	-	TI XIO2213B	
StarTech	PCIe x1 Card	PCI1394MP	-	3	TSB43AB23	
					TI TSB81BA3	
Belkin	PCI Card	F5U623-APL	3	-	+ TSB82AA2	
StarTech	PCI Card	PCI1394B_3	2	1	TI 3AA651W	
SIIG	PCI Card	NN-44012-S8	-	3	TI TSB43AB23	
					TI TSB81BA3	
SIIG	PCI Card	NN-831012-S2	3	-	+ TSB82AA2	
Belkin	PCI Card	F5U503V	-	3	TI TSB43AB23	
Syba /						
IO Crest	ExpressCard 34	SD-EXPC34-2F	-	2	TI XIO2200	
Sonnet	ExpressCard 34	FW800-E34	2	-	TI XIO2213	
StarTech	ExpressCard 34	EC13942	-	2	TI XIO2200A	
StarTech	ExpressCard 34	EC1394B2	2	-	TI - XIO2213A	
SIIG	ExpressCard 34	NN-EC2012-S2	-	2	TI XIO2200	
SIIG	ExpressCard 34	NN-EC2012-S1	-	2	VIA VT6315	
					LSI/Agere	
StarTech	PCie	PEX1394B3	2	1	FW643	

• This document will be updated as recommendations for different cards become available.

Here is a list of PCI, PCI Express (PCI-e), ExpressCard|34, ExpressCard|54 and PCMCIA FireWire card models that use approved FireWire chipsets. While these cards have not been tested by the PreSonus QA Team, they use the same or similar configurations to ones that have been tested. Because of this, PreSonus has high confidence in their compatibility with our FireWire products.

Vendor	Format Part #		1394b	1394a	1394 Chipset	Notes
						No Longer
ADS	PCI	API-315	-	3	TI TSB41AB3	Made
<u>APIOtek</u>	ExpressCard 34	EC-0002C		2	TI XIO 2200A	
<u>APIOtek</u>	ExpressCard 34	EC-002A	-	2	TI XIO 2200A	
<u>Belkin</u>	PCle	F5U504	-	3	TI XIO2200	
Best						
<b>Connectivity</b>	ExpressCard 34	SD-EXP30012	-	2	VIA VT6315	
<u>CoolGear</u>	CardBus	B004FJRPSM	-	2	TI TSB43AB2	
<b>Dawicontrol</b>	PCI	DC-1394 PCI	-	3	TI TSB43AB23	Europe Only
<u>Dawicontrol</u>	PCle	DC-FW800 PCIe	2	1	TI XIO2213A	Europe Only

<b>Dawicontrol</b>	PCle	DC-1394 PCIe	-	3	TI XIO 2200A	Europe Only
					TI TSB82AA2 +	
Dawicontrol	PCI	DC-FW800 PCI	2	1	TI TSB81BA3	Europe Only
					TI TSB82AA2 +	
Dawicontrol	ExpressCard 34	DC-FW800 eCard	2	-	TI TSB81BA3	Europe Only
Dawicontrol	ExpressCard   34	DC-1394 eCard	-	2	TI XIO2200A	Europe Only
					TI TSB82AA2 +	
DeLock/Tragant	PCI	89 167	2	-	TI TSB81BA3	Europe Only
DeLock/Tragant	PCI	89 234	2	1	TI TSB43AB23	Europe Only
DeLock/Tragant	PCI	89196	-	3	TI TSB43AB23	Europe Only
					LSI/Agere	
DeLock/Tragant	PCle	61586	2	1	FW643	Europe Only
					LSI/Agere	
DeLock/Tragant	PCle	61643	3	-	FW643	Europe Only
					LSI/Agere	
DeLock/Tragant	PCle	89208	4	-	FW643	Europe Only
DeLock/Tragant	PCle	89210	3	-	TI XIO2213B	Europe Only
Del est /Tresent		61596	2	1	LSI/Agere	Europe Only
DeLock/Tragant	PCIe	61586	2	1	FW643	Europe Only
DeLock/Tragant	PCle	89121	-	2	TI TSB43AB23	Europe Only
DeLock/Tragant	PCle	89172	-	2	TI TSB43AB22A	Europe Only
DeLock/Tragant	PCle	89202	-	2	TI XIO2200A	Europe Only
DIGITUS	PCle	DS-30203	2	1	TI XIO2213	Europe Only
DIGITUS	ExpressCard 34	DS-31202	-	2	TI XIO2200	Europe Only
<u>ExSys</u>	PCle	EX-16415	3	1	TI XIO2213	Europe Only
<u>ExSys</u>	PCle	EX-16415-L	3	1	TI XIO2213	Europe Only
					TI TSB43AB22A	
E.C.		EX 6440		2	+	Europe Only
<u>ExSys</u>	PCI	EX-6410	-	3	TI TSB81BA3 TI TSB43AB22A	Europe Only
					11 15B43AB22A +	
<u>ExSys</u>	PCI	EX-6411	2	1	TI TSB81BA3	Europe Only
					TI TSB43AB22A	
					+	
<u>ExSys</u>	PCI	EX-6503E	3	-	TI TSB81BA3	Europe Only
					TI TSB43AB22A	
					+	
<u>ExSys</u>	Cardbus	EX-6601E	2	1	TI TSB81BA3	Europe Only
<u>ExSys</u>	PC Express	EX-6701	2	-	TI XIO2213	Europe Only
<u>ExSys</u>	PCle	EX-16440	-	2	TI XIO2200A	Europe Only
<u>ExSys</u>	PCle	EX-16450	-	2	TI XIO2200A	Europe Only
<u>ExSys</u>	PCle	EX-16500E	-	4	TI TSB43AB23	Europe Only
<u>ExSys</u>	PCle	EX-16501E	-	4	TI TSB43AB23	Europe Only
<u>ExSys</u>	PCle	EX-16502E	-	2	TI TSB43AB22A	Europe Only

<u>ExSys</u>	PCI	EX-6440	-	3	TI TSB43AB22A	Europe Only
<u>ExSys</u>			-	3	TI TSB43AB22A	Europe Only
	PCI	EX-6450 EX-6500E	-	4	TI TSB43AB22A	Europe Only
<u>ExSys</u>					TI TSB43AB22A	
<u>ExSys</u>	PCI	EX-6502E	-	2		Europe Only
<u>ExSys</u>	PCI	EX-6506E	-	3	TI TSB43AB22A	Europe Only
<u>ExSys</u>	PCI	EX-6507E	-	2	TI TSB43AB22A	Europe Only
<u>ExSys</u>	PCI	EX-6508E	-	2	TI TSB43AB22A	Europe Only
<u>ExSys</u>	PCI	EX-6509E	-	2	TI TSB43AB22A	Europe Only
<u>ExSys</u>	PCI	EX-6514E	-	4	TI TSB43AB22A	Europe Only
<u>ExSys</u>	CardBus	EX-6605E	-	2	TI TSB43AB22A	Europe Only
<u>ExSys</u>	CardBus	EX-6606E	-	1	TI TSB43AB22A	Europe Only
FireWire Direct	ExpressCard 34	NAVCBFW8EC	2	-	TI XIO2213	
					TI TSB81BA3	
FireWire Direct	CardBus	10.803	2	1	+ TSB82AA2	
FireWire Direct	PCle	NAVPCIEFW8002X	3	3	TI XIO2213	
FireWire Direct	PCle	NAVPCIEFW800	2	2	TI XIO2213	
FireWire Direct	PCle	NAVPCIESATFW	3	-	TI XIO2213	
<u>Koutech</u>	ExpressCard   34	1002E	-	2	TI XIO2200	
Other						
World						
Computing	ExpressCard 34	EXPC342F	-	2	TI XIO2200	
Other						
World						
Computing	ExpressCard 34	EXPC342F1U	-	2	TI XIO2200	
Rain Computers	ExpressCard   34	Express Card	-	2	TI XIO2200	
<u>SIIG</u>	ExpressCard 34	NN-000042-S2	2	-	TI XIO2213B	
SIIG	PCI	NN-40012-S8	-	3	TI TSB43AB23	
					TI TSB81BA3	
SIIG	CardBus	NN-8CB212-S1	1	1	+ TSB82AA2	
SIIG	PCle	NN-E20112-S2	-	2	TI XIO2200A	
SIIG	PCle	NN-E38012-S3	2	1	TI XIO2213	
SIIG	ExpressCard   54	NN-EC2812-S2	1	1	TI XIO2213B	
SIIG	CardBus	NN-PC8312-S2	2	1	TI TSB81BA3 + TSB82AA2	
<u>SIIG</u> SIIG	CardBus CardBus	NN-PC8312-S2	2	1	+ TSB82AA2	
SIIG	CardBus	NN-PCM222-S4	-	2	+ TSB82AA2 TI TSB43AB23	
<u>SIIG</u> <u>SIIG</u>	CardBus CardBus	NN-PCM222-S4 NN-PCM312-S2	2 - -	2 3	+ TSB82AA2 TI TSB43AB23 TI TSB43AB23	
<u>SIIG</u> <u>SIIG</u> <u>SIIG</u>	CardBus CardBus Expresscard 34	NN-PCM222-S4 NN-PCM312-S2 NN-EC2012-S1		2 3 2	+ TSB82AA2 TI TSB43AB23 TI TSB43AB23 VIA VT6315	
<u>SIIG</u> <u>SIIG</u>	CardBus CardBus	NN-PCM222-S4 NN-PCM312-S2	-	2 3	+ TSB82AA2 TI TSB43AB23 TI TSB43AB23 VIA VT6315 TI XIO2000	
<u>SIIG</u> <u>SIIG</u> <u>SIIG</u> <u>Sonnet</u>	CardBus CardBus Expresscard 34 PCle	NN-PCM222-S4 NN-PCM312-S2 NN-EC2012-S1 FW400A-E	- - - -	2 3 2 3	+ TSB82AA2 TI TSB43AB23 TI TSB43AB23 VIA VT6315 TI XIO2000 TI TSB81BA3 +	
<u>SIIG</u> <u>SIIG</u> <u>SIIG</u>	CardBus CardBus Expresscard 34	NN-PCM222-S4 NN-PCM312-S2 NN-EC2012-S1		2 3 2	+ TSB82AA2 TI TSB43AB23 TI TSB43AB23 VIA VT6315 TI XIO2000	

<u>Sonnet</u>	PCI	FWUSB2A	-	2	TI XIO2000	
<u>Sonnet</u>	PCle	FWUSB2A-E	-	3	TI XIO2000	
<u>Sonnet</u>	ExpressCard 34	FWUSB2-E34	-	2	TI XIO2000	
					LSI/Agere	
<u>StarTech</u>	ExpressCard 34	EC13941A1B	1	1	FW643	
<u>StarTech</u>	ExpressCard   34	EC13942A2	-	2	VIA VT6315	
StarTach	mini-PCle	MPEX1394B3	2	1	LSI/Agere FW643	
<u>StarTech</u>	IIIIII-PCIE	IVIPEA1394D3	Ζ	I		
StarTech	PCle	PCI1394MP	_	3	TI TSB43AB23 + TI-TSB12LV26	
Starretti	PCIE	PCI1594IVIP	-	5	LSI/Agere	
StarTech	PCle	PEX1394B3LP	2	1	FW643	
ST Lab	PCI	F-330	-	4	TI TSB43AB23	
ST Lab	PCI	F-161/F-171	2	1	TI TSB882AA2	
ST Lab	PCI	F-330	-	3	TI TSB43AB23	
ST Lab	PCle	F-360	-	3	VIA VT6315	
ST Lab	PCle	F-261	-	3	TI XIO22313A	
						No Longer
<u>ST Lab</u>	CardBus	C-180	2	1	TI TS82AA2	Made
<u>ST Lab</u>	ExpressCard 34	C-201	-	2	TI XIO2200AZHH	
<u>ST Lab</u>	ExpressCard 34	C-410	-	2	VIA VT6315	
<u>Syba</u>	ExpressCard 34	SD-EXP30012	-	2	VIA VT6315	
Syba / IO Crest	PCle	SD-PEX-FWB	2	2	TI TSB82AA2	
<u>Ultra</u>	PCI	ULT31883	3	-	TI TSB82AA2	
<u>UniBrain</u>	PCle	FB800e Dual	4	-	LSI FW643-e	
		FireBoard800e				
<u>UniBrain</u>	PCle	V.2	2	-	LSI FW643-e	
<u>UniBrain</u>	PCI	FireBoard-800 V.2	3	-	TSB83AA23	
<u>UniBrain</u>	PCI	1205	-	3	TSB83AA23	
<u>UniBrain</u>	PCle	1214	-	2	TI XIO2200A	
<u>UniBrain</u>	ExpressCard 34	FireCard 800e	2	-	TI XIO2213A	
<u>UniBrain</u>	ExpressCard 34	FireCard 8400e	-	2	TI XIO2200AZHH	
					TI TSB82AA2 +	No Longer
<u>Vantec</u>	PCI	UGT-FW100	2	1	TI TSB81BA3D	Made
<u>Vantec</u>	PCle	UGT-FW200	-	2	VIA VT6315N	
<u>Vantec</u>	PCle	UGT-FW210	2	1	TI XIO2213	

Many of these companies, as well as many more that are not listed, have other FireWire cards that use various TI or VIA chipsets. However, because the specific chipset used by these cards has not been provided by their manufacturers, they have not been included in this list. Stating that a FireWire card uses a "TI" or "VIA" chipset is not enough information for that card to be recommended for use with our products.

Please note: manufacturers may change chipsets at any time, without warning, so it is recommended that you verify these models

# Thunderbolt Compatibility

PreSonus has confirmed that its FireWire interfaces, including the StudioLive-series mixers, are fully compatible with Apple's <u>Thunderbolt to FireWire 800</u> adapter (Apple part number MD464). Interface users can expect performance to at least equal, if not exceed, the performance with a regular FireWire 800 port.

Using a Thunderbolt to ExpressCard Adapter and an ExpressCard|34 FireWire Card Adapter from the supported lists shown on this document will allow a PreSonus FireStudio or StudioLive interface to work with your Thunderbolt enabled system.

Manufacturer	Model	Туре	Notes
	Echo		
SonnetTech	ExpressCard	Thunderbolt	Works with recommended FireWire ExpressCard 34 Cards

Here is an excerpt of ExpressCard|34 cards from the preceding interface lists that will work with the Echo Thunderbolt Adapter.

Vendor	Format	Part #	1394b	1394a	1394 Chipset	Notes
Syba / IO						
Crest	ExpressCard 34	SD-EXPC34-2F	-	2	TI XIO2200	
StarTech	ExpressCard 34	EC13942	-	2	TI XIO2200A	
StarTech	ExpressCard 34	EC1394B2	2	-	TI XIO2213A	
SIIG	ExpressCard 34	NN-EC2012-S2	-	2	TI XIO2200	
SIIG	ExpressCard 34	NN-EC2012-S1	-	2	VIA VT6315	
Sonnet	ExpressCard 34	FW800-E34	2	-	TI XIO2213	

#### **Incompatible Hardware**

### • Cables

The length of the 1394 cable in use has to be 6.6feet or 2M or shorter in length. Longer 1394 cables have proved to be problematic, especially in areas where there are high amounts of EMF such as microwaves, power lines in walls or overhead power lines outside a studio, etc. To reduce the risk of dropouts is to use a heavily shielded 1394 cable.

## • FireWire Cable Adapters

Using an adapter to change the connector of a 1394 cable is not recommended. These adapters come in many configurations, 9pin to 6pin, 6pin to 4pin, etc. We have found that the grounding in these connectors is either inconsistent or insufficient which results in our FireWire devices not being able to sync properly to or be detected by a computer. Please use a cable that is properly configured for your connections.

#### • FireWire Chipsets

The following FireWire chipsets have been tested and found to be incompatible with PreSonus FireStudio Family interfaces and StudioLive mixers:

Manufacturer	Chipset	Туре	Notes
ALi / Acer	M5251	PCI	This chipset drops data packets resulting in devices not able to sync, play and/or record audio properly
ALi / Acer	M5253	PCI	This chipset drops data packets resulting in devices not able to sync, play and/or record audio properly
ALi / Acer	M5271	PCI	This chipset drops data packets resulting in devices not able to sync, play and/or record audio properly
JMicron	JMB381	PCI Express, ExpressCard 34, Mainboard	This chipset drops data packets resulting in devices not able to sync, play and/or record audio properly. JMicron chipsets are found on laptops and motherboards as an embedded interface
JMicron	JMB382	PCI Express, ExpressCard 34, Mainboard	This chipset drops data packets resulting in devices not able to sync, play and/or record audio properly. JMicron chipsets are found on laptops and motherboards as an embedded interface
JMicron	JMB8383	PCI Express, ExpressCard 34, Mainboard	This chipset drops data packets resulting in devices not able to sync, play and/or record audio properly. JMicron chipsets are found on laptops and motherboards as an embedded interface
NEC	D72870	PCI	This chipset drops data packets resulting in devices not able to sync, play and/or record audio properly
NEC	D72871	PCI	This chipset drops data packets resulting in devices not able to sync, play and/or record audio properly
NEC	D72872	PCI	This chipset drops data packets resulting in devices not able to sync, play and/or record audio properly
NEC	D72873	PCI	This chipset drops data packets resulting in devices not able to sync, play and/or record audio properly

NEC	D72874	PCI Express	This card has limited functionality. If the listed amount of playback channels is exceeded, or if there is other significant traffic on the bus (DV cam, hard drive, etc) the card will fail and will not work until after a reboot: 48 channels at 44.1 or 48 kHz, 24 channels at 88.2 or 96kHz
Ricoh	R5C551	PCI	Drops data packets resulting in devices not able to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface
Ricoh	R5C552	PCI	Drops data packets resulting in devices not able to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface
Ricoh	R5C553	PCI	Drops data packets resulting in devices not able to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface
Ricoh	R5C803	PCI Express	Drops data packets resulting in devices not able to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface
Ricoh	R5C832	PCI Express	Drops data packets resulting in devices not able to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface
Ricoh	R5C833	PCI Express	Drops data packets resulting in devices not able to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface
Ricoh	R5C847	PCI Express	Drops data packets resulting in devices not able to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface
Ricoh	R5C853	PCI Express	Drops data packets resulting in devices not able to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface
Ricoh	R5U230	PCI Express	Drops data packets resulting in devices not able to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface
Ricoh	R5U231	PCI Express	Drops data packets resulting in devices not able to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface
Ricoh	R5U241	PCI Express	Only found on laptops and desktop as embedded interface. Customers have reported R5U241 as having limited success up to 16 tracks before drops out start to occur.
Texas Inst	TSB12LV21A	PCI	Drops data packets resulting in devices not able to sync, play and/or record audio properly

			Drops data packets resulting in devices not able
Texas Inst	TSB12LV21B	PCI	to sync, play and/or record audio properly

- ATI Radeon 9000/9001 IGP Video Chipset. Symptoms are consistent clicks and pops during audio playback. This video chipset is only found in PC laptops and is entirely integrated as the computer's only video controller. PreSonus strongly recommends that users do not purchase a system with this chipset for use with a FireStudio interface or StudioLive mixer.
- **Motherboards with nForce4 Chipset.** Symptoms include reduced to very poor performance especially if using the onboard FireWire connection. It is highly recommend that users do not purchase a system with this motherboard.

The following devices are shown by the OHCI Tool from TC that these are compatible, however we have found that while they do provide better than basic functionality, the overall performance of the interface suffers when track counts and plug-in usage exceeds 16 stereo tracks total. Therefore we can only recommend these cards as partial functionality. We would recommend that these only be used for minimal needs and use a recommended interface as shown on page 2 of this document.

VIA	VT6306	PCI, Cardbus, Motherboards, Laptops	This controller has been verified to work with limited capability. On some older motherboards, it may only support a limited number of audio channels.
VIA	VT6307	PCI, Cardbus, Motherboards, Laptops	This controller has been verified to work with limited capability. On some older motherboards, it may only support a limited number of audio channels.
VIA	VT6308	PCI, Cardbus, Motherboards, Laptops	This controller has been verified to work with limited capability. On some older motherboards, it may only support a limited number of audio channels.