PreSonus™

Approved FireWire chipsets for FireStudio™-series interfaces and StudioLive™ mixers

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PreSonus FireStudio-series 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 computer configuration to use their FireStudio-series interface.

Please note: This document supersedes previous compatibility documents released by PreSonus on our Web site 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
Texas Instruments (TI)	TI TSB82AA2 + 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), Express-Card|34, ExpressCard|54, and PCMCIA FireWire cards using approved FireWire chipsets that have been tested by the PreSonus QA team:

Vendor	Format	Part #	1394b	1394a	1394 Chipset
Aaxeon	PCIe x1 Card	FWB-68300	4	-	TI XIO2213B
StarTech	PCI Card	PCI1394MP	-	3	TSB43AB23
Belkin	PCI Card	F5U623-APL	3	-	TI TSB81BA3 + TSB82AA2
StarTech	PCI Card	PCI1394B_3	2	1	TI 3AA651W
SIIG	PCI Card	NN-44012-S8	-	3	TI TSB43AB23
SIIG	PCI Card	NN-831012-S2	3	-	TI TSB81BA3 + 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
StarTech	PCIe x1	PEX1394B3	2	1	LSI/Agere 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 PC-MCIA FireWire card models that use approved FireWire chipsets. Although these cards have not been tested by the PreSonus QA team, they use the same, or similar, configurations to cards that have been tested. Because of this, PreSonus is confident that they are compatible with our FireWire products.

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

Dawicontrol	PCI	DC-FW800 PCI	2	1	TI TSB82AA2 + TI TSB81BA3	Europe Only
Dawicontrol	ExpressCardl34	DC-FW800 eCard	2	-	TI TSB82AA2 + TI TSB81BA3	Europe Only
Dawicontrol	ExpressCardl34	DC-1394 eCard	-	2	TI XIO2200A	Europe Only
DeLock/ Tragant	PCI	89 167	2	-	TI TSB82AA2 + TI TSB81BA3	Europe Only
DeLock/ Tragant	PCI	89 234	2	1	TI TSB43AB23	Europe Only
DeLock/ Tragant	PCI	89196	-	3	TI TSB43AB23	Europe Only
DeLock/ Tragant	PCIe	61586	2	1	LSI/Agere FW643	Europe Only
DeLock/ Tragant	PCIe	61643	3	-	LSI/Agere FW643	Europe Only
DeLock/ Tragant	PCIe	89208	4	-	LSI/Agere FW643	Europe Only
DeLock/ Tragant	PCIe	89210	3	-	TI XIO2213B	Europe Only
DeLock/ Tragant	PCIe	61586	2	1	LSI/Agere FW643	Europe Only
DeLock/ Tragant	PCIe	89121	-	2	TI TSB43AB23	Europe Only
DeLock/ Tragant	PCIe	89172	-	2	TI TSB43AB22A	Europe Only
DeLock/ Tragant	PCIe	89202	-	2	TI XIO2200A	Europe Only
DIGITUS	PCIe	DS-30203	2	1	TI XIO2213	Europe Only
DIGITUS	ExpressCardl34	DS-31202	-	2	TI XIO2200	Europe Only
ExSys	PCIe	EX-16415	3	1	TI XIO2213	Europe Only
ExSys	PCIe	EX-16415-L	3	1	TI XIO2213	Europe Only
ExSys	PCI	EX-6410	-	3	TI TSB43AB22A + TI TSB81BA3	Europe Only
ExSys	PCI	EX-6411	2	1	TI TSB43AB22A + TI TSB81BA3	Europe Only
ExSys	PCI	EX-6503E	3	-	TI TSB43AB22A + TI TSB81BA3	Europe Only
ExSys	Cardbus	EX-6601E	2	1	TI TSB43AB22A + TI TSB81BA3	Europe Only
ExSys	PC Express	EX-6701	2	-	TI XIO2213	Europe Only
ExSys	PCIe	EX-16440	-	2	TI XIO2200A	Europe Only
ExSys	PCIe	EX-16450	-	2	TI XIO2200A	Europe Only
ExSys	PCIe	EX-16500E	-	4	TI TSB43AB23	Europe Only

ExSys	PCIe	EX-16501E	-	4	TI TSB43AB23	Europe Only
ExSys	PCIe	EX-16502E	-	2	TI TSB43AB22A	Europe Only
ExSys	PCI	EX-6440	-	3	TI TSB43AB22A	Europe Only
ExSys	PCI	EX-6450	-	3	TI TSB43AB22A	Europe Only
ExSys	PCI	EX-6500E	-	4	TI TSB43AB22A	Europe Only
ExSys	PCI	EX-6502E	-	2	TI TSB43AB22A	Europe Only
ExSys	PCI	EX-6506E	-	3	TI TSB43AB22A	Europe Only
ExSys	PCI	EX-6507E	-	2	TI TSB43AB22A	Europe Only
ExSys	PCI	EX-6508E	-	2	TI TSB43AB22A	Europe Only
ExSys	PCI	EX-6509E	-	2	TI TSB43AB22A	Europe Only
ExSys	PCI	EX-6514E	-	4	TI TSB43AB22A	Europe Only
ExSys	CardBus	EX-6605E	-	2	TI TSB43AB22A	Europe Only
FireWire Direct	ExpressCard|34	NAVCBFW8EC	2	-	TI XIO2213	
FireWire Direct	CardBus	10.803	2	1	TI TSB81BA3 + TSB82AA2	
FireWire Direct	PCIe	NAVPCIEFW8002X	3	3	TI XIO2213	
FireWire Direct	PCIe	NAVPCIEFW800	2	2	TI XIO2213	
FireWire Direct	PCIe	NAVPCIESATFW	3	-	TI XIO2213	
Koutech	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	
SIIG	ExpressCard|34	NN-000042-S2	2	-	TI XIO2213B	
SIIG	PCI	NN-40012-S8	-	3	TI TSB43AB23	
SIIG	CardBus	NN-8CB212-S1	1	1	TI TSB81BA3 + TSB82AA2	
SIIG	PCIe	NN-E20112-S2	-	2	TI XIO2200A	
SIIG	PCIe	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	
SIIG	CardBus	NN-PCM222-S4	-	2	TI TSB43AB23	
SIIG	CardBus	NN-PCM312-S2	-	3	TI TSB43AB23	

SIIG	Expresscard|34	NN-EC2012-S1	-	2	VIA VT6315	
Sonnet	PCIe	FW400A-E	-	3	TI XIO2000	
Sonnet	PCI	FW800A	2	1	TI TSB81BA3 + TSB82AA2	
Sonnet	PCIe	FW800-E	3	-	TI XIO2213	
Sonnet	PCIe	FW8USB2A-E	3	-	TI XIO2213	
Sonnet	PCI	FWUSB2A	-	2	TI XIO2000	
Sonnet	PCIe	FWUSB2A-E	-	3	TI XIO2000	
Sonnet	ExpressCard|34	FWUSB2-E34	-	2	TI XIO2000	
StarTech	ExpressCard|34	EC13941A1B	1	1	LSI/Agere FW643	
StarTech	ExpressCard|34	EC13942A2	-	2	VIA VT6315	
StarTech	mini-PCIe	MPEX1394B3	2	1	LSI/Agere FW643	
StarTech	PCIe	PCI1394MP	-	3	TI TSB43AB23 + TI-TSB12LV26	
StarTech	PCIe	PEX1394B3LP	2	1	LSI/Agere 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	PCIe	F-360	-	3	VIA VT6315	
ST Lab	PCIe	F-261	-	3	TI XIO22313A	
ST Lab	CardBus	C-180	2	1	TI TS82AA2	No Longer Made
ST Lab	ExpressCard|34	C-201	-	2	TI XIO2200AZHH	
ST Lab	ExpressCard|34	C-410	-	2	VIA VT6315	
Syba	ExpressCard|34	SD-EXP30012	-	2	VIA VT6315	
Syba / IO Crest	PCIe	SD-PEX-FWB	2	2	TI TSB82AA2	
Ultra	PCI	ULT31883	3	-	TI TSB82AA2	
UniBrain	PCIe	FB800e Dual	4	-	LSI FW643-e	
UniBrain	PCIe	FireBoard800e V.2	2	-	LSI FW643-e	
UniBrain	PCI	FireBoard-800 V.2	3	-	TSB83AA23	
UniBrain	PCI	1205	-	3	TSB83AA23	
UniBrain	PCIe	1214	-	2	TI XIO2200A	
UniBrain	ExpressCard|34	FireCard 800e	2	-	TI XIO2213A	
UniBrain	ExpressCard|34	FireCard 8400e	-	2	TI XIO2200AZHH	
Vantec	PCI	UGT-FW100	2	1	TI TSB82AA2 + TI TSB81BA3D	No Longer Made
Vantec	PCIe	UGT-FW200	-	2	VIA VT6315N	
Vantec	PCIe	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 we recommend that you verify these models.

Thunderbolt Compatibility

Using a Thunderbolt-to-ExpressCard adapter and an ExpressCard|34 FireWire-card adapter from the "supported" lists in this document will allow a PreSonus FireStudio-series or StudioLive-series interface to work with your Thunderbolt-enabled system.

Manufacturer	Model	Type	Notes
SonnetTech	Echo ExpressCard	Thunderbolt	Works with recommended FireWire ExpressCard|34 Cards.

Apple has announced its intention to support FireWire with a Thunderbolt adapter; however at the time this document was created, Apple has yet to make that adapter available for purchase.

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
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

You should only use 1394 cables that are 6.6 feet (2 meters) or shorter. Longer 1394 cables have proven to be problematic, especially in areas where there are high-EMF sources such as microwaves, power lines in walls, or overhead power lines outside a studio. To reduce the risk of dropouts, 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, such as 9-pin-to-6-pin and 6-pin-to-4-pin. We have found that the grounding in these connectors generally is 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-series interfaces and StudioLive mixers:

Manufacturer	Chipset	Type	Notes
ALi / Acer	M5251	PCI	This chipset drops data packets, resulting in devices being unable to sync, play and/or record audio properly.
ALi / Acer	M5253	PCI	This chipset drops data packets, resulting in devices being unable to sync, play and/or record audio properly.
ALi / Acer	M5271	PCI	This chipset drops data packets, resulting in devices being unable to sync, play and/or record audio properly.
JMicron	JMB381	PCI Express, ExpressCardl34, Mainboard	This chipset drops data packets, resulting in devices being unable to sync, play and/or record audio properly. JMicron chipsets are found on laptops and motherboards as an embedded interface.
JMicron	JMB382	PCI Express, ExpressCardl34, Mainboard	This chipset drops data packets, resulting in devices being unable to sync, play and/or record audio properly. JMicron chipsets are found on laptops and motherboards as an embedded interface.
JMicron	JMB8383	PCI Express, ExpressCardl34, Mainboard	This chipset drops data packets, resulting in devices being unable 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 being unable to sync, play and/or record audio properly.
NEC	D72871	PCI	This chipset drops data packets, resulting in devices being unable to sync, play and/or record audio properly.
NEC	D72872	PCI	This chipset drops data packets, resulting in devices being unable to sync, play and/or record audio properly.
NEC	D72873	PCI	This chipset drops data packets, resulting in devices being unable 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 96 kHz
Ricoh	R5C551	PCI	This chipset drops data packets, resulting in devices being unable to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface.
Ricoh	R5C552	PCI	This chipset drops data packets, resulting in devices being unable to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface.

Ricoh	R5C553	PCI	This chipset drops data packets, resulting in devices being unable to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface.
Ricoh	R5C803	PCI Express	This chipset drops data packets, resulting in devices being unable to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface.
Ricoh	R5C832	PCI Express	This chipset drops data packets, resulting in devices being unable to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface.
Ricoh	R5C833	PCI Express	This chipset drops data packets, resulting in devices being unable to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface.
Ricoh	R5C847	PCI Express	This chipset drops data packets, resulting in devices being unable to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface.
Ricoh	R5C853	PCI Express	This chipset drops data packets, resulting in devices being unable to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface.
Ricoh	R5U230	PCI Express	This chipset drops data packets, resulting in devices being unable to sync, play and/or record audio properly. Ricoh chipsets are found on laptops and motherboards as an embedded interface.
Ricoh	R5U231	PCI Express	This chipset drops data packets, resulting in devices being unable 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 an embedded interface. Customers have reported having limited success up to 16 tracks before dropouts start to occur.
Texas Inst	TSB12LV21A	PCI	This chipset drops data packets, resulting in devices being unable to sync, play and/or record audio properly.
Texas Inst	TSB12LV21B	PCI	This chipset drops data packets, resulting in devices being unable 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.

VIA Chipsets

The following devices are shown by the OHCI Tool from TC to be 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 exceed 16 stereo tracks. Therefore, we recommend that these cards only be used for minimal needs and suggest that you use a recommended interface, as shown on page 1 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.

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