

Blackrock HSF-A64 Adapter

PN-7258



Blackrock Microsystems, Inc.

630 Komas Drive, Suite 200

Salt Lake City, UT 84108

Tel: +1 (801) 852-5533

www.blackrockmicro.com

HSF-A64 Adapter – Instructions For Use

1 Overview

The HSF-A64 adapter allows users to connect a NeuroNexus A64 (Rev 3 or 4*) Probe to the Blackrock Microsystems Cerebus Data Acquisition System. An overview of how this adapter fits into a complete neural recording system is provided below.

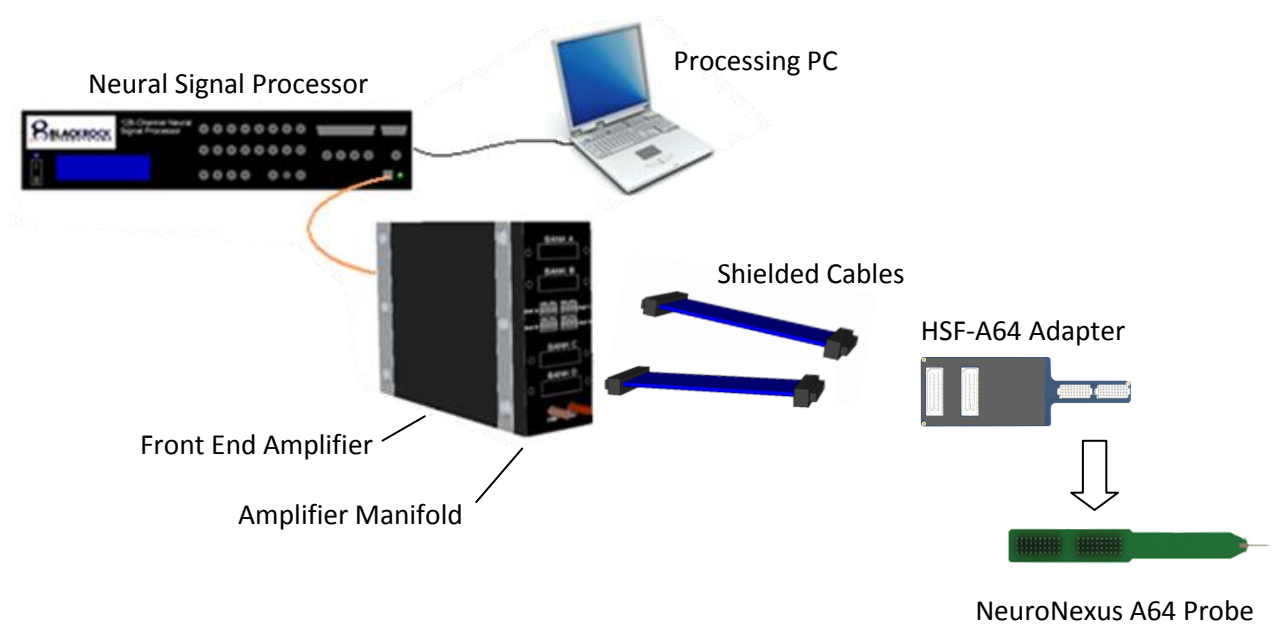


Figure 1: System Overview

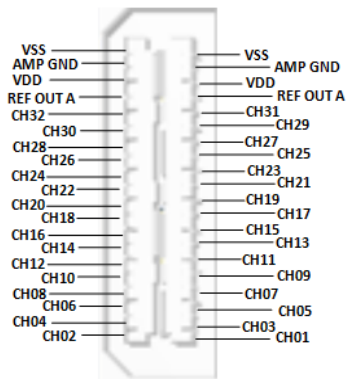
The Blackrock Amplifier Manifold, Shielded Cables, and Cerebus Data Acquisition System (Front End Amplifier, Neural Signal Processor) are each purchased separately.

*Please note that if using revision 4 of the NeuroNexus A64 Probe, a map file will be required in order for the channels on the NeuroNexus A64 to map correctly in Central.

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2 HSF-A64 Adapter Pin-Out

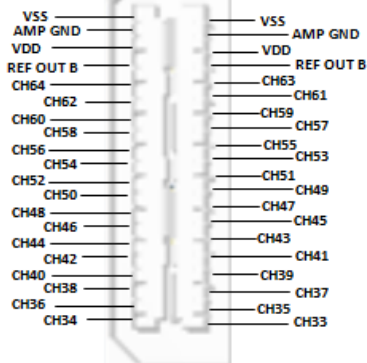
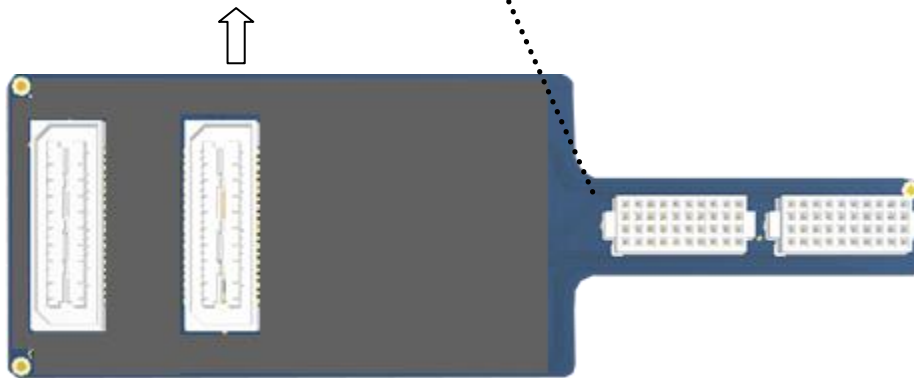
QSE Connector (Ch 1-32) - Connects to Bank A on Amplifier Manifold



NeuroNexus A64 Connector

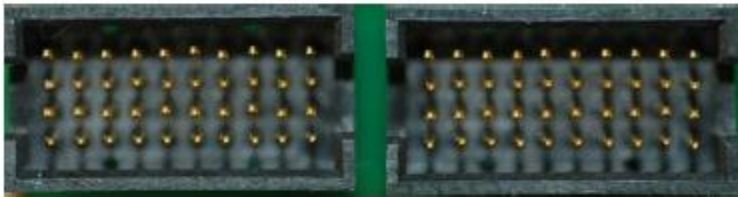
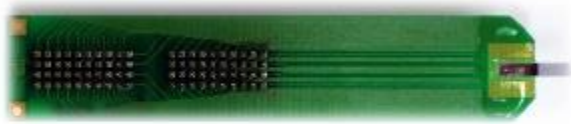
64	63	62	61	60	58	56	54	52	50
G				59	57	55	53	51	49
G	R			6	8	10	12	14	16
1	2	3	4	5	7	9	11	13	15

48	47	46	45	44	42	41	40	39	38
G				43	37	33	36	35	34
G	R			22	28	32	29	30	31
17	18	19	20	21	23	24	25	26	27



QSE Connector (Ch 33-64) - Connects to Bank B on Amplifier Manifold

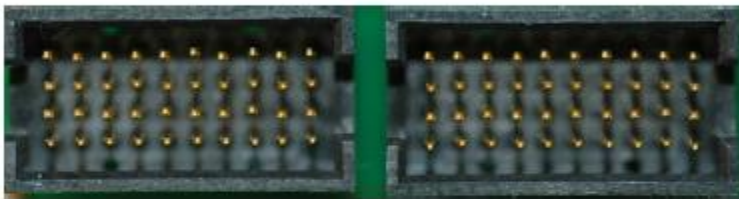
3 NeuroNexus A64 Revision 3 Pin-Out



1	2	3	4	5	7	9	11	13	15
G	R			6	8	10	12	14	16
G				59	57	55	53	51	49
64	63	62	61	60	58	56	54	52	50

17	18	19	20	21	23	24	25	26	27
				22	28	32	29	30	31
				43	37	33	36	35	34
48	47	46	45	44	42	41	40	39	38

4 NeuroNexus A64 Revision 4 Pin-Out



24	27	22	28	29	20	18	16	14	12
G	R			26	25	23	21	19	17
G				39	40	42	44	46	48
41	38	43	37	36	45	47	49	51	53

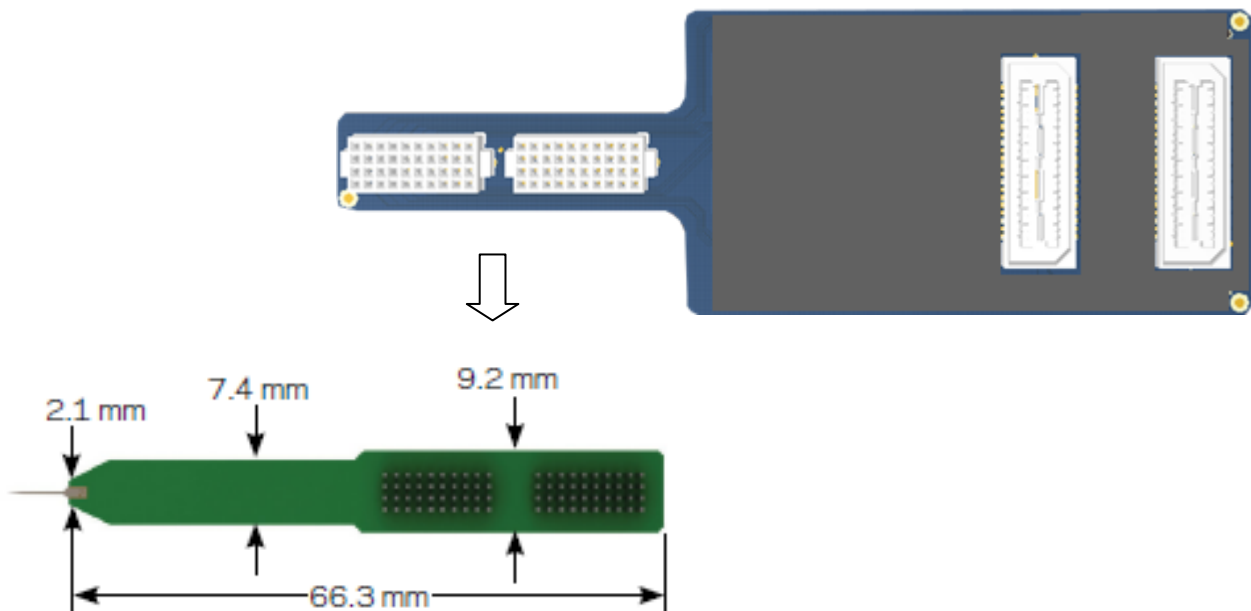
10	15	8	13	6	4	9	2	7	1
G	R			11	5	32	3	30	31
G				54	60	33	62	35	34
55	50	57	52	59	61	56	63	58	64

5 Instructions for Assembly

- 5.1 Turn off all power to the Cerebus Data Acquisition System
- 5.2 Attach the Amplifier Manifold to the front panel of the Front End Amplifier.
- 5.3 Attach Bank A on the Amplifier Manifold to the Ch1-32 QSE connector on the HSF-A64 adapter (see section 2 for connector pin-outs).
- 5.4 Attach Bank B on the Amplifier Manifold to the Ch33-64 QSE connector on the HSF-A64 adapter (see section 2 for connector pin-outs).

NOTE: Reference A must be selected on Bank B if using revision 3 of the NeuroNexus A64.

- 5.5 Attach the NeuroNexus A64 Probe to the A64 Connectors on the adapter. The probe should extend away from the adapter as shown below.



- 5.6 Turn on the power supply to the Front End Amplifier and power on the NSP.
- 5.7 For further instructions regarding the use of the Cerebus Data Acquisition System and Amplifier Manifold, refer to their individual user manuals.

6 Warranty

Blackrock Microsystems, LLC warrants that its products are free from defects in materials and manufacturing for a period of one year from the date of shipment. Blackrock will, at its option, repair or replace any product that does not comply with this warranty. This warranty is voided by:

1. Any modification or attempted modification to the product done by anyone other than an authorized Blackrock employee
2. Any abuse, negligent handling or misapplication of the product.

This constitutes the sole warranty made by Blackrock, LLC. There are no other warranties, expressed or implied, which extend beyond those described herein or to anyone other than the original purchaser, including the implied warranties of merchantability and fitness for a particular purpose. In no event shall Blackrock Microsystems, LLC be liable for any incidental or consequential damages, or for the infringement of any patent rights or third party rights due to the use of its products.

6.1 Return Merchandise Authorization (RMA)

In the unlikely event that your adaptor needs to be returned to Blackrock for repair or maintenance, do not send any equipment back without a Return Merchandise Authorization Number. An RMA number will be issued to you by a Blackrock representative. If you need to obtain an RMA number, you may contact a product support representative at +1 (801) 582-5533.

Once an RMA number has been issued, it is important to safely pack the returned item for shipping back to Blackrock. It is preferred that you save the original boxes and packing materials that your system arrived in for return shipment. Please address the package as follows:

Blackrock Microsystems, Inc.

ATTN: RMA#

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