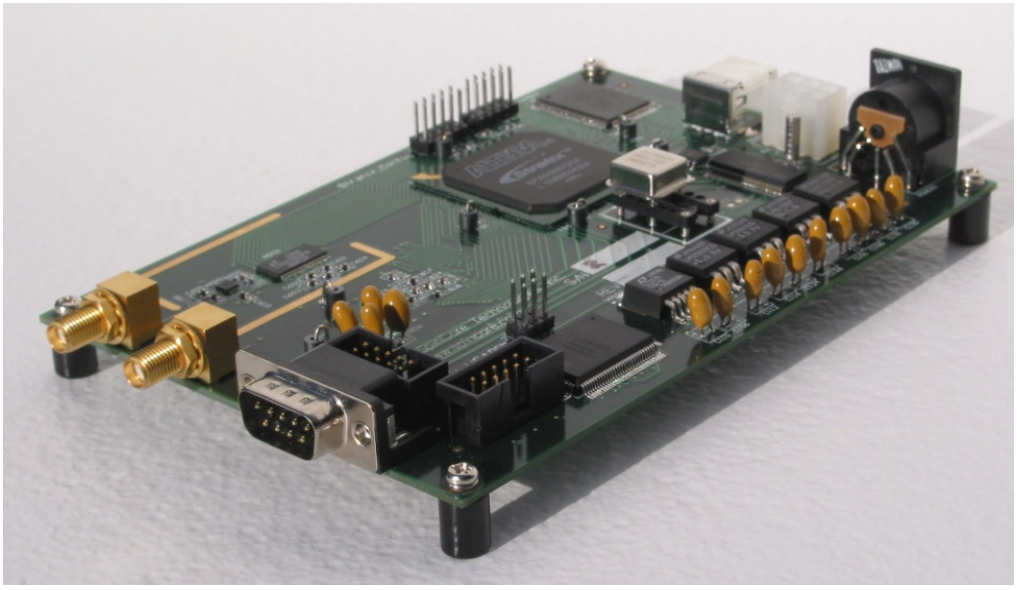
RadioProcessor-USB™

Firmware Revision 12-6

Addendum to Owner's Manual



SpinCore Technologies, Inc.
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We appreciate your business!

At SpinCore we try to fully support the needs of our customers. If you are in need of assistance, please contact us and we will strive to provide the necessary support.

SpinCore Technologies, Inc. makes every effort to verify the correct operation of the equipment. This equipment version is not intended for use in a system in which the failure of a SpinCore device will threaten the safety of equipment or person(s).

Table of Contents

I. Your customized design

Differences from the main User's Manual

Your version of the RadioProcessor-USB™, firmware revision 12-6, exhibits all the functionality described in the main RadioProcessor-USB manual as of February 26, 2007. This addendum contains additional information which is intended to supersede what is contained in the original product manual.

Your board differs from the main RadioProcessor-USB design in the following ways:

	Standard Configuration	Firmware 12-6
Frequency registers	16	4
Tx phase registers	16	4
Digital output bits	4	8

Table 1: Changes in capability

The available signals on Headers J300, J301 and JP302 have also changed. The diagram below is identical to the one contained in the main User's Manual and is provided here again for your convenience.

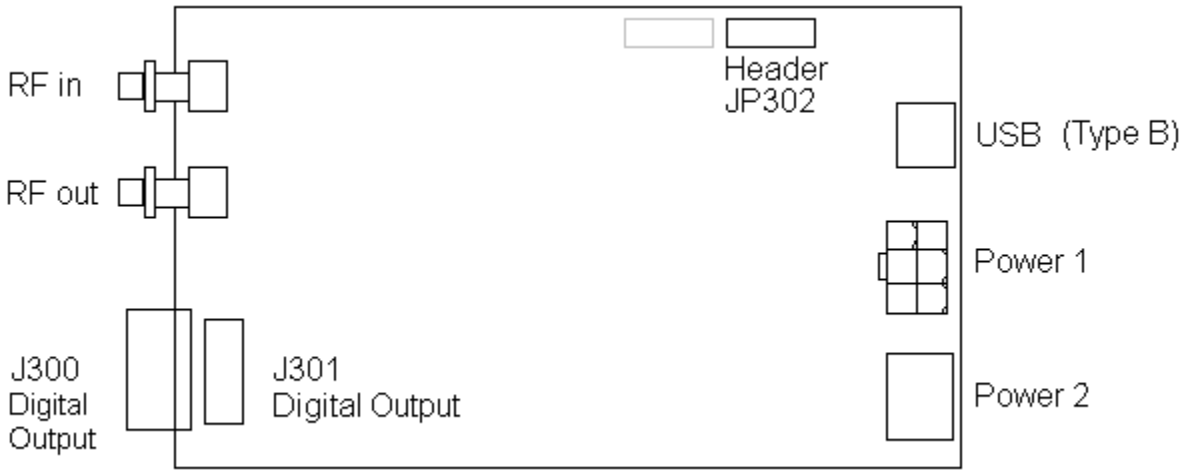

Figure 1: Connector Locations

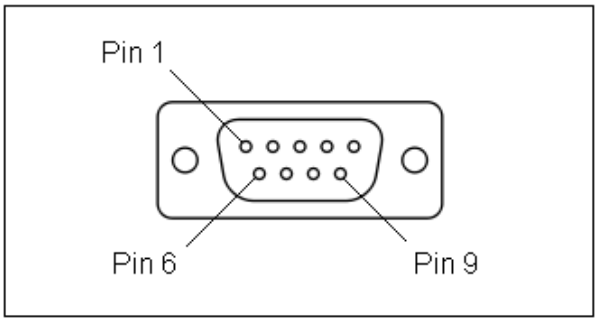

Figure 2: DB-9 Output Connector J300

Pin number	Function
1	Flag bit 0
2	Flag bit 1
3	Flag bit 2
4	Flag bit 3
5	Flag bit 4
6	Ground
7	Ground
8	Ground
9	Ground

Table 2: DB-9 Output Connector J300 signal list (changes in yellow)

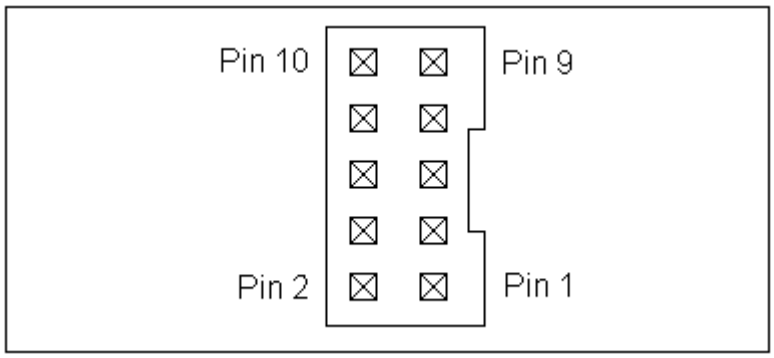

Figure 3: Shrouded IDC Output Header J301

Pin number	Function
1	Ground
2	Flag bit 0
3	Ground
4	Flag bit 1
5	Ground
6	Flag bit 2
7	Ground
8	Flag bit 3
9	Ground
10	Flag bit 4

Table 3: Shrouded IDC Output Header J301 signal list (changes in yellow)

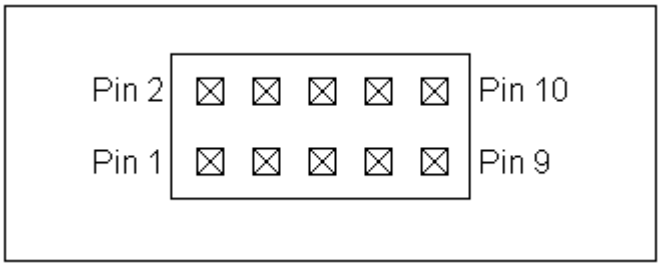

Figure 4: Output Header JP302

Pin number	Function
1	Ground
2	Flag bit 5
3	Ground
4	Flag bit 6
5	Ground
6	Flag bit 7
7	Ground
8	Hardware Trigger
9	Ground
10	Hardware Reset

Table 4: Output Header JP302 signal list (changes in yellow)

Differences in programming with SpinAPI

This design is backward-compatible with code written for the standard configuration RadioProcessor and RadioProcessor-USB devices. To make use of the extra output bits, simply pass 8 bits for the *flags* argument in pb_inst_radio() or pb_inst_radio_shape(). For example, passing 0xFF will turn on TTL bits 0 through 7, and passing 0x10 will turn on TTL bit 4 and turn all other TTL bits off.

Contact Information

Web Form at: **http://www.spincore.com**

Product URL: **http://www.spincore.com/products/RadioProcessorUSB/**