

RF Interface Board SPI Command Set

Rev:	Date:	Description
1.0		Initial Release
1.1	12/12/2003	Revised Opcodes to be 16-bit, added GF enable command

Command Summary:

Type	Command	Opcode
<i>Isolation</i>		
	Isolate all interfaces	0x0010
	Isolate/Disable Long-range Radio	0x0011
	Isolate Short-range Radio	0x0012
	Isolate Console	0x0013
	Isolate Pager	0x0014
<i>Ground Fault</i>		
	Test long range radio ground fault circuit	0x0020
	Enable long-range radio ground fault circuit	0x0021
	Read 12-bit long range radio high side ground-fault value	0x0022
	Read 12-bit long range radio low side ground-fault value	0x0023
<i>Power Saving</i>		
	Shutdown long range radio port (power saving mode)	0x0030
	Disable console power (power saving mode)	0x0031
<i>Status</i>		
	Read Status registers	0x0040
<i>Pager Serial</i>		
	Write byte to Pager serial port	0x0050
	Read byte from pager serial port	0x0051
<i>Analog</i>		
	Read 12-bit analog channel 2	0x0060
	Read 12-bit analog channel 3	0x0061
	Read 12-bit analog channel 4	0x0062
	Read 12-bit analog channel 5	0x0063
	Read 12-bit analog channel 6	0x0064
	Read 12-bit analog channel 7	0x0065

Status Registers:

Address	Bit	Description
0x00	0	SPI Interrupt: 1 if interrupt generated 0 if no interrupt generated
	1	Ground Fault present: 1 if ground fault is present 0 if no ground fault is present
	2	Serial port byte waiting: 1 if a byte is waiting in the serial port buffer 0 if no byte is waiting in the serial port buffer
	3	Overall isolation status: 1 if an interface has been isolated 0 if no interfaces are isolated
	4	Long-range radio power status: 1 if shut-down for power saving mode 0 if on
	5	Console power status: 1 if shut-down for power saving mode 0 if on
	6-7	Unused
0x01	0	All interfaces isolated: 1 if all interfaces are isolated 0 if not all interfaces are isolated
	1	Long-range radio interface isolated: 1 if long-range interface is isolated 0 if long-range interface is not isolated
	2	Short-range radio interface isolated: 1 if short-range interface is isolated 0 if short-range interface is not isolated
	3	Console interface isolated: 1 if console interface is isolated 0 if console interface is not isolated
	4	Pager interface isolated: 1 if pager interface is isolated 0 if pager interface is not isolated
	5-7	Unused

Command Descriptions:

Isolation

Isolate all interfaces OPCODE: 0x10

Returns: Interface Status Register Byte

CS

SI _____><0x10><_____

SO _____><ISOSTAT><_____