Wiring RFM95W LoRa Radio board to the Spresense with Extension board and the Rohm SensorShield-EVK-003			Spresense	Arduino Mega
<u>Link</u>			SPI5	<u>Link</u>
Vin	Use 3.3V or 5V Even tho the LoRa radio board is being fed 3.3V it still can communicate with the Spresense 1.8V SPI bus. RFM95W can be fed 3.3 to 6.0V.	Breakout 3.3V pin	3.3V	
Gnd	Ground	Breakout GND pin	GND	
EN	Connected to the enable pin of the regulator. Pulled high to Vin by default, pull low to completely cut power to the radio.			
G0	GPIO 0 or IRG pin. Connects to an interrupt-capable pin: Radio can interrupt MCU. D02-D09, D14-D15, D22, D29, D30-D32, D39-D44 D00-D01, D10-D13, D16-D21, D23-D28, D33-D38	Any Pin: <b>D02</b>	D25	D02
G1-G5	5 general purpose I/O 3.3V logic pins	G1=D03 G2=D04		
SCK	Connects to SPI Clock 39Mbps (Tx only) 9.75Mbps (Tx/Rx)	Named: D13	Named: D23	D52
MISO	Connects to SPI MISO Microcontroller In Serial Out pin, for data sent from the radio to your processor, 3.3V logic level	Named: D12	Named: D17	D50
MOSI	Connects to SPI MOSI Microcontroller Out Serial In pin, for data sent from your processor to the radio	Named: D11	Named: D16	D51
cs	Connects to SPI Chip Select pin. Drop it low to start an SPI transaction. Its an input to the chip setPins[CS, RST, G0] LoRa.setPins(18, 26, 25); ← Cannot used Named Pin 24  Because it breaks the Pin Group function!	<b>D06</b> Named: D10	D18 Named: D24	D10
RST	Connects to pin for radio resetting. It's pulled high by default which is reset. Pull LOW to turn on the radio. Should be pulled low for 100 microseconds, and then released. The user should then wait for 5 ms before using the chip.	Any pin: D05	D26	D08

Pins D10-D13 are part of Pin Group SPI4. There is no need to declare pinMode() for these pins. Read the <u>SPI Library</u> documentation for more information on how to use the SPI from the Arduino environment.

Pin Groups can be nasty:

- https://developer.sony.com/develop/spresense/docs/arduino\_developer\_guide\_e
   n.html
- pinMode() sets the specified pin to GPIO mode, but note that the mode setting is controlled in units of pin groups. For example, in the case of SPI, the 4 pins CS, SCK, MOSI, and MISO belong to the same group, and if pinMode() specified as the argument of CS pin is called, it will not be able to operate as the SPI function. For more information about the pin groups, see Connector pin list (xlsx).