* 1. **Hardware Platform**
* We are using 2 arduinos both of them are model **UNO.**
* Number of pins: 32?
* Digital I/O Pins: 14 (of which 6 provide PWM output)

PWM Digital I/O Pins: 6

Analog Input Pins: 6

DC Current per I/O Pin: 20 mA

DC Current for 3.3V Pin: 50 mA

* Memory size:

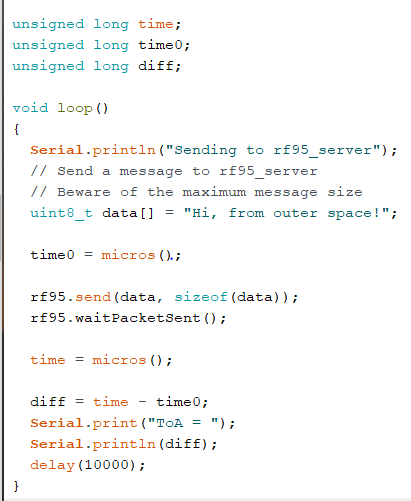
EEPROM: 1KB

Flash memory: for program storage: 32 KB

SRAM: used for local variables: 2KB

* Main characteristics of LoRa shields:
* Compatible with 3.3v or 5v I/O Arduino Board.
* Frequency Band: 915MHz/868 MHZ/433 MHZ (Pre-configure in factory)
* Low power consumption
* Compatible with **Arduino Leonardo, Uno, Mega, DUE**
* External Antenna via I-Pex connector
* 168 dB maximum link budget.
* +20 dBm - 100 mW constant RF output vs.
* +14 dBm high efficiency PA.
* Programmable bit rate up to 300 kbps.
* High sensitivity: down to -148 dBm.
* Bullet-proof front end: IIP3 = -12.5 dBm.
* Excellent blocking immunity.
* Low RX current of 10.3 mA, 200 nA register retention.
* Fully integrated synthesizer with a resolution of 61 Hz.
* FSK, GFSK, MSK, GMSK, LoRaTM and OOK modulation.
* Built-in bit synchronizer for clock recovery.
* Preamble detection.
* 127 dB Dynamic Range RSSI.
* Automatic RF Sense and CAD with ultra-fast AFC.
* Packet engine up to 256 bytes with CRC.

**4.1. Time on Air**

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