CSSerial

void serialBegin(short header, long baudRate = 115200);

Run during Arduino setup to initialize and open checksumed serial port. A 2-byte header, formatted as a short, is required as identification for the Arduino to differentiate it from others. An optional baud rate can be supplied.

int32_t serialAvailable();

Run during Arduino loop to check for available checksumed serial messages. Returns the number of bytes read from the message, between 0 and 256. Returns -1 if no message was available.

void registerHeader(uint16_t header);

Run during Arduino setup to add valid headers that the Arduino will respond to if received.

uint16_t getHeader();

Run after a message has been received to get the received header. Useful for determining the type of message received.

byte* getDataBuffer();

Run after a message has been received to get a pointer to the data buffer. Data received can be extracted here for processing prior to replying. Adding data to the buffer for sending will overwrite the buffer contents.

void addData(T input);

Run after a message has been received to add the given data to the buffer for sending back to the master. Each time this is run in succession, the data will be added to the buffer in order, overwriting anything received from the master.

void sendData();

Run after all data has been added to the buffer and is ready to be sent to the master. Running

will send the data to the master. Ensure this is run prior to checking for new available serial messages to ensure that data is not overwritten.	