### hitchBOT

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# Chapter 1

# hitchBOT

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# **Chapter 2**

# File Index

### 2.1 File List

Here is a list of all files with brief descriptions:

| hitchBOT/old code/GPS-shield-RMC-test-sketch-master/GPS-shield-RMC-test-sketch-master/GPStest_RM- |    |
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### **Chapter 3**

### **File Documentation**

3.1 hitchBOT/old code/GPS-shield-RMC-test-sketch-master/GPS-shield-RMC-test-sketch-master/GPStest\_RMC/GPStest\_RMC.ino File Reference

```
#include "WProgram.h"
#include "NewSoftSerial.h"
```

#### **Macros**

- #define powerpin 4
- #define GPSRATE 4800
- #define BUFFSIZ 90

#### **Functions**

- void setup ()
- uint32\_t parsedecimal (char \*str)
- void readline (void)
- void loop ()

#### **Variables**

- NewSoftSerial mySerial = NewSoftSerial(2, 3)
- char buffer [BUFFSIZ]
- char \* parseptr
- char buffidx
- uint8\_t hour
- uint8\_t minute
- uint8\_t second
- uint8\_t year
- uint8\_t month
- uint8\_t date
- uint32\_t latitude

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- uint32\_t longitude
- uint8\_t groundspeed
- uint8\_t trackangle
- char latdir
- char longdir
- char status

#### 3.1.1 Macro Definition Documentation

#### 3.1.1.1 #define BUFFSIZ 90

Definition at line 32 of file GPStest\_RMC.ino.

#### 3.1.1.2 #define GPSRATE 4800

Definition at line 27 of file GPStest\_RMC.ino.

#### 3.1.1.3 #define powerpin 4

Definition at line 23 of file GPStest RMC.ino.

#### 3.1.2 Function Documentation

#### 3.1.2.1 void loop ( )

Definition at line 100 of file GPStest\_RMC.ino.

#### 3.1.2.2 uint32\_t parsedecimal ( char \* str )

Definition at line 68 of file GPStest\_RMC.ino.

#### 3.1.2.3 void readline (void)

Definition at line 81 of file GPStest\_RMC.ino.

#### 3.1.2.4 void setup ( )

Definition at line 47 of file GPStest\_RMC.ino.

#### 3.1.3 Variable Documentation

#### 3.1.3.1 char buffer[BUFFSIZ]

Definition at line 36 of file GPStest\_RMC.ino.

## $3.1\ hitchBOT/old\ code/GPS-shield-RMC-test-sketch-master/GPS-shield-RMC-test-sketch-master/GPStest\_RM-C/GPStest\ RMC.ino\ File$

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3.1.3.2 char buffidx

Definition at line 38 of file GPStest\_RMC.ino.

3.1.3.3 uint8\_t date

Definition at line 41 of file GPStest\_RMC.ino.

3.1.3.4 uint8\_t groundspeed

Definition at line 43 of file GPStest\_RMC.ino.

3.1.3.5 uint8\_t hour

Definition at line 41 of file GPStest RMC.ino.

3.1.3.6 char latdir

Definition at line 44 of file GPStest\_RMC.ino.

3.1.3.7 uint32\_t latitude

Definition at line 42 of file GPStest\_RMC.ino.

3.1.3.8 char longdir

Definition at line 44 of file GPStest\_RMC.ino.

3.1.3.9 uint32\_t longitude

Definition at line 42 of file GPStest\_RMC.ino.

3.1.3.10 uint8\_t minute

Definition at line 41 of file GPStest\_RMC.ino.

3.1.3.11 uint8\_t month

Definition at line 41 of file GPStest RMC.ino.

3.1.3.12 NewSoftSerial mySerial = NewSoftSerial(2, 3)

Definition at line 19 of file GPStest\_RMC.ino.

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3.1.3.13 char\* parseptr

Definition at line 37 of file GPStest\_RMC.ino.

3.1.3.14 uint8\_t second

Definition at line 41 of file GPStest\_RMC.ino.

3.1.3.15 char status

Definition at line 45 of file GPStest\_RMC.ino.

3.1.3.16 uint8\_t trackangle

Definition at line 43 of file GPStest\_RMC.ino.

3.1.3.17 uint8\_t year

Definition at line 41 of file GPStest\_RMC.ino.

#### 3.2 hitchBOT/old code/matrixdemo/matrixdemo.ino File Reference

```
#include "HT1632.h"
```

#### **Macros**

- #define DATA 2
- #define WR 3
- #define CS 4
- #define CS2 5

#### **Functions**

- void setup ()
- void loop ()

#### **Variables**

HT1632LEDMatrix matrix = HT1632LEDMatrix(DATA, WR, CS, CS2)

#### 3.2.1 Macro Definition Documentation

3.2.1.1 #define CS 4

Definition at line 5 of file matrixdemo.ino.

```
3.2.1.2 #define CS2 5
```

Definition at line 6 of file matrixdemo.ino.

#### 3.2.1.3 #define DATA 2

Definition at line 3 of file matrixdemo.ino.

#### 3.2.1.4 #define WR 3

Definition at line 4 of file matrixdemo.ino.

#### 3.2.2 Function Documentation

```
3.2.2.1 void loop ( )
```

Definition at line 21 of file matrixdemo.ino.

```
3.2.2.2 void setup ( )
```

Definition at line 13 of file matrixdemo.ino.

#### 3.2.3 Variable Documentation

3.2.3.1 HT1632LEDMatrix matrix = HT1632LEDMatrix(DATA, WR, CS, CS2)

Definition at line 11 of file matrixdemo.ino.

#### 3.3 hitchBOT/old code/scrolldemo/scrolldemo.ino File Reference

```
#include "HT1632.h"
```

#### **Macros**

- #define DATA 2
- #define WR 3
- #define CS 4
- #define CS2 5

#### **Functions**

- void setup ()
- void loop ()

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#### **Variables**

• HT1632LEDMatrix matrix = HT1632LEDMatrix(DATA, WR, CS, CS2)

#### 3.3.1 Macro Definition Documentation

3.3.1.1 #define CS 4

Definition at line 5 of file scrolldemo.ino.

3.3.1.2 #define CS2 5

Definition at line 6 of file scrolldemo.ino.

3.3.1.3 #define DATA 2

Definition at line 3 of file scrolldemo.ino.

3.3.1.4 #define WR 3

Definition at line 4 of file scrolldemo.ino.

#### 3.3.2 Function Documentation

3.3.2.1 void loop ( )

Definition at line 18 of file scrolldemo.ino.

3.3.2.2 void setup ( )

Definition at line 13 of file scrolldemo.ino.

#### 3.3.3 Variable Documentation

3.3.3.1 HT1632LEDMatrix matrix = HT1632LEDMatrix(DATA, WR, CS, CS2)

Definition at line 11 of file scrolldemo.ino.

### 3.4 hitchBOT/old code/sketch\_jul22a/sketch\_jul22a.ino File Reference

#include <SoftwareSerial.h>

#### **Functions**

- SoftwareSerial GPRS (7, 8)
- void setup ()
- void loop ()
- void clearBufferArray ()

#### **Variables**

- unsigned char buffer [64]
- int count =0

#### 3.4.1 Function Documentation

```
3.4.1.1 void clearBufferArray ( )
```

Definition at line 37 of file sketch\_jul22a.ino.

```
3.4.1.2 SoftwareSerial GPRS (7,8)
```

```
3.4.1.3 void loop ( )
```

Definition at line 19 of file sketch\_jul22a.ino.

```
3.4.1.4 void setup ( )
```

Definition at line 12 of file sketch\_jul22a.ino.

#### 3.4.2 Variable Documentation

3.4.2.1 unsigned char buffer[64]

Definition at line 10 of file sketch\_jul22a.ino.

3.4.2.2 int count =0

Definition at line 11 of file sketch\_jul22a.ino.

### 3.5 hitchBOT/README.md File Reference

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