

ReadSerial

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Chapter 1

Directory Hierarchy

1.1 Directories

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Chapter 2

File Index

2.1 File List

Here is a list of all files with brief descriptions:

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Chapter 3

Directory Documentation

3.1 ReadSerial Directory Reference

Files

- file [ReadSerial.ino](#)

Chapter 4

File Documentation

4.1 ReadSerial/ReadSerial.ino File Reference

```
#include <SPI.h>
```

Macros

- `#define P1 D0`
LED output pin definition.

Functions

- `void setup ()`
Arduino setup function.
- `void LEDSoft ()`
Turns all LED outputs off.
- `void loop ()`
Arduino main loop.

Variables

- `int sendData = 0`
< SPI library included (not used in this sketch)

4.1.1 Macro Definition Documentation

4.1.1.1 P1

```
#define P1 D0
```

LED output pin definition.

`P1` is a macro alias for pin `D0`. This sketch uses `P1` as the LED control pin.

4.1.2 Function Documentation

4.1.2.1 LEDSoft()

```
void LEDSoft ()
```

Turns all LED outputs off.

Sets pin **P1** LOW to ensure the LED is turned off.

4.1.2.2 loop()

```
void loop ()
```

Arduino main loop.

- Checks if a byte is available on the Serial interface.
- Reads one byte with `Serial.read()` and stores it in `sendData`.
- Uses a switch statement to compare the received value to expected ASCII codes.
- Prints the received value as a decimal number.

Cases:

- 97 or 'a': turns LEDs off, then turns P1 on, prints 97
- 'b' (98): turns LEDs off, prints 98
- 99 or 'c': turns LEDs off, prints 99
- 100 or 'd': turns LEDs off, prints 100
- 101 or 'e': turns LEDs off, prints 101
- default: turns LEDs off, prints whatever was received

4.1.2.3 setup()

```
void setup ()
```

Arduino setup function.

Initializes Serial communication at 9600 baud and configures pin D0 as an output.

4.1.3 Variable Documentation

4.1.3.1 sendData

```
int sendData = 0
```

< SPI library included (not used in this sketch)

Stores the latest received byte from Serial

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