

Communicating with the MMFE8

Communication with the mmfe8 is through udp packets processed by MicroBlaze.

The default ip and MAC addresses can be changed in main.c. The UDP address is set in echo.c. The write command format follows:

```
W reg_addr data1 data2 data3 ... \n
```

This command will write data1 to reg_addr and data2 to the following register address. The address will continue to be incremented as long as more data exists. All commands must end with '\n'. An example would be:

```
W 0x44A10010 0xc0ffee01 0xc0ffee 0xbeef 0xc0ffee04 \n
```

Writes:

```
0xc0ffee01 to 0x44A10010
```

```
0x00c0ffee to 0x44A10014
```

```
0x0000beef to 0x44A10018
```

```
0xc0ffee04 to 0x44A1001C
```

```
R reg_addr N \n
```

Reads the contents from reg_addr. Increments the address pointer and returns the contents of that address, continuing for a total of N reads.

```
P reg_addr data1 data2 data3 ... \n
```

This "Poke" command writes the data without incrementing the address pointer. This is useful for filling a FIFO.

```
K reg_addr N \n
```

This "Peke" command reads the data without incrementing the address pointer. This is also useful for FIFOs.

Both upper and lower case initial command letters are recognized. The commandhandler.c file gives the details. MicroBlaze acknowledges write commands with "OK" or "ERR!". If the command does not start with an alpha char and end with a newline char, the command will be identified as malformed by MicroBlaze. The register range is from 0x44A10000 to 0x44A1FFFF. There was no room for additional memory on the MMFE8. Please limit the total udp payload to ~100 chars.