## mail

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



### Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# **mikroETH 100**<sup>™</sup>

### Manual

All Mikroelektronika's development systems feature a large number of peripheral modules expanding microcontroller's range of application and making the process of program testing easier. In addition to these modules, it is also possible to use numerous additional modules linked to the development system through the I/O port connectors. Some of these additional modules can operate as stand-alone devices without being connected to the microcontroller.

Additional Board

### **E**MikroElektronika

#### mikroETH 100

The mikroETH 100 additional board is used to connect the microcontroller installed in some device to the Ethernet network.

#### **Key features:**

- IEEE 802.3™ Compliant Fast Ethernet Controller;
- Integrated MAC and 10/100Base-T PHY;
- Hardware Security Acceleration Engines;
- 24-Kbyte Transmit/Receive Packet Buffer SRAM;
- Operating voltage range of 3.0V to 3.6V; etc.



Figure 1: mikroETH 100 with mode 5 activated

#### How to connect the board?

The mikroETH 100 additional board is connected to the microcontroller in some device via pads CN1 and CN2. Connection with the Ethernet network is established via the RJ45 connector. Jumpers J1-J4 are used to select PSP mode (Parallel Slave Port interface), table 1.

	Position of jumpers J1-J4					
PSP MODE	1	0	OFF			
1		PSPCFG2, PSPCFG3, PSPCFG4	PSPCFG1			
2	PSPCFG4	PSPCFG2, PSPCFG3	PSPCFG1			
3	PSPCFG2	PSPCFG3, PSPCFG4	PSPCFG1			
4	PSPCFG2, PSPCFG4	PSPCFG3	PSPCFG1			
5	PSPCFG3	PSPCFG1, PSPCFG2	PSPCFG4			
6	PSPCFG1, PSPCFG3	PSPCFG2	PSPCFG4			
9	PSPCFG2, PSPCFG3	PSPCFG1	PSPCFG4			
10	PSPCFG1, PSPCFG2, PSPCFG3		PSPCFG4			

Table 1

#### MikroElektronika

PSP MODE	#Pi	ns	Data Width	Address/Data Multiplexing	Control lines	Theoretical
	min	max				Performance @ 10MHz (Mbits/s)
1	19	26	8 bit	No	CS, RD, WR	80
2	19	26	8 bit	No	CS, EN, R/W	80
3	26	34	16 bit	No	CS, RD, WRL, WRH	160
4	26	34	16 bit	No	CS, R/W, B0SEL, B1SEL	160
5	12	19	8 bit	Yes	AL, CS, RD, WR	<80
6	12	19	8 bit	Yes	AL, CS, EN, R/W	<80
9	19	21	16 bit	Yes	AL, CS, RD, WRL, WRH	<80
10	19	21	16 bit	Yes	AL, CS, R/W, B0SEL, B1SEL	<80

#### Table 2



Figure 2: mikroETH 100 additional board connection schematic



Figure 3: Dimensions of the mikroETH 100 additional board



Figure 4: mikroETH 100 connected to the Ethernet cable

#### **MikroElektronika**

# 

If you want to learn more about our products, please visit our website at www.mikroe.com

If you are experiencing some problems with any of our products or just need additional information, please place your ticket at www.mikroe.com/en/support

If you have any questions, comments or business proposals, do not hesitate to contact us at office@mikroe.com