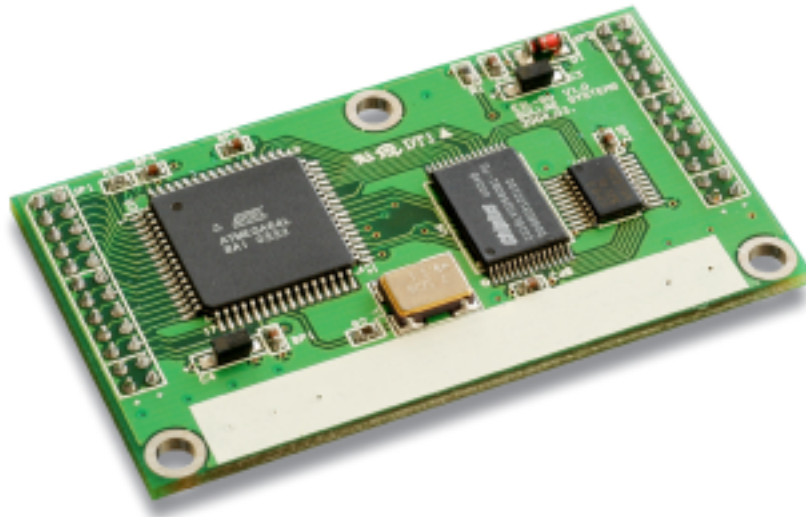


EZL - 80

Version 1.0



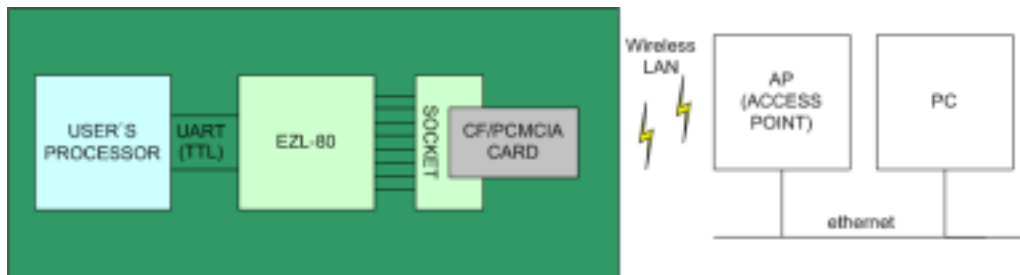
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1.

가 가
 TCP/IP
 TCP/IP , TCP/IP TCP/IP
 TCP/IP , TCP/IP (OS)
 TCP/IP ezTCP
 “ ” TCP/IP ()
 가
 ezTCP TCP/IP
 TCP/IP



EZL-80 ezTCP IEEE802.11b(wireless LAN,)
 TCP/IP / . EZL-80 16bit PCMCIA
 CF

EZL-80 TCP/IP
 , TCP/IP TCP/IP

EZL-80 Access Point(AP, AP) infrastructure

, AP ad-hoc

EZL-80 TCP/IP/UDP DHCP IP

2.

2.1.

- EZL -80
- 2mm pitch 2 x 12 female connector 1 ()
- EZL -80 evaluation board ()
- 5V ()
- PC RS232C ()

2.2.

		3.3V ±0.3V
		10mA typical
	60mm x 35mm	
	about 10g	
	2mm pitch 2x12 male connector 2	
	TTL level(1200bps ~ 115200bps) RTS/CTS	
	PCMCIA()	CF()
	TCP, UDP, IP, ICMP, ARP, TELNET, DHCP	
	T2S	TCP,
	COD	TCP,
	ATC	TCP, / (AT command emulation)
	U2S	UDP
	ezConfig	
	ezSerialConfig	
	hotflash	
	ezterm	

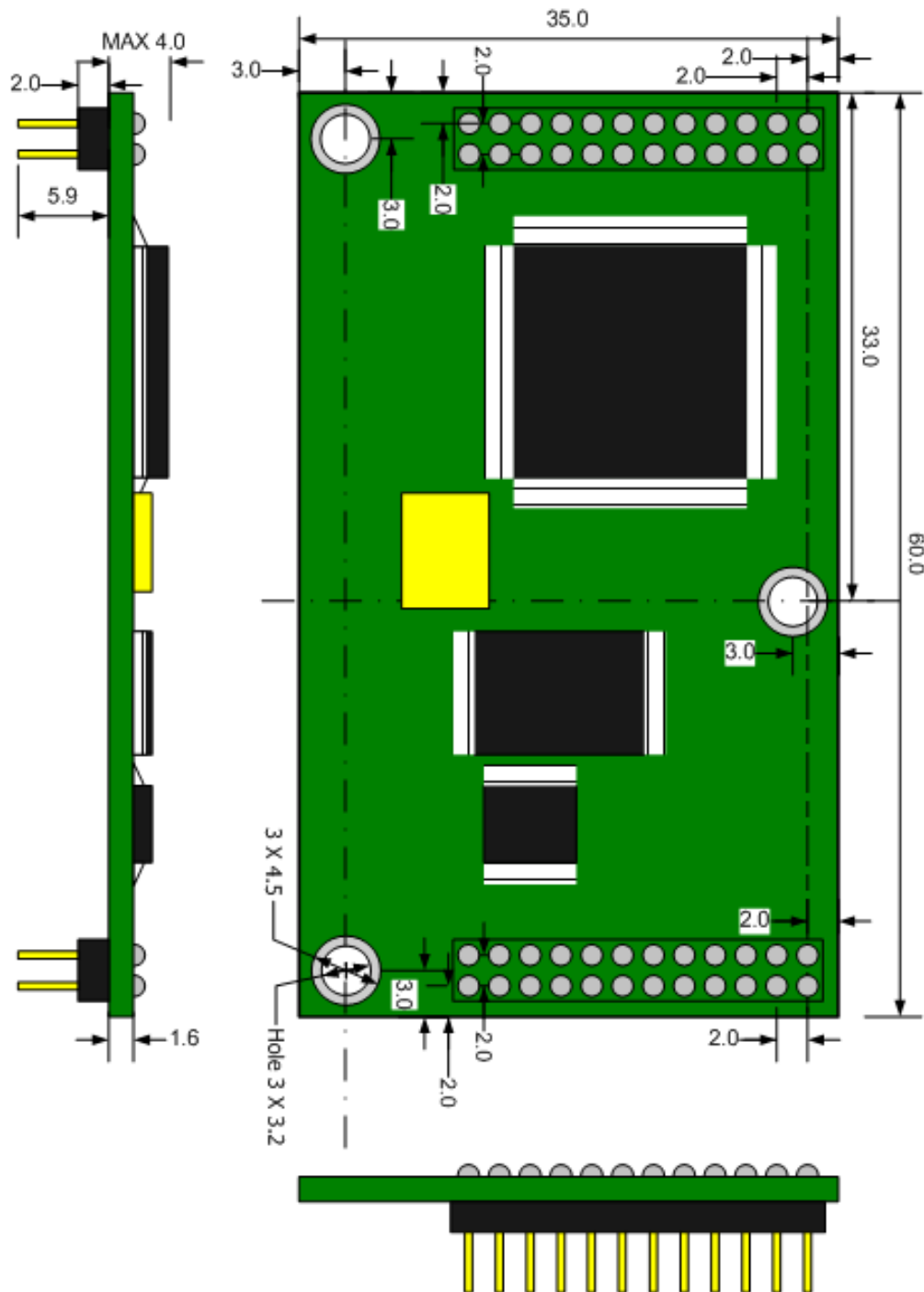


EZL -80

(<http://www.eztcp.com>)

3.

3.1. Dimension



3.2.

JP1				
#	NAME1	NAME2	FUNCTION	I/O
1	GND		Ground	-
2	GND		Ground	-
3	PE0	RXD0	Serial RXD	I
4	PE1	TXD0	Serial TXD	O
5	PE2	P0	General Purpose Port(Reserved)	I/O
6	PE3	P1	General Purpose Port(Reserved)	I/O
7	PE4	LINK_LED	LINK LED	O
8	PE5	STS_LED	STATUS LED	O
9	PE6	RXD_LED	Wireless LAN RXD LED	O
10	PE7	TXD_LED	Wireless LAN TXD LED	O
11	GND		Ground	-
12	GND		Ground	-
13	PB0	DATA0	DATA0	I/O
14	PB1	DATA1	DATA1	I/O
15	PB2	DATA2	DATA2	I/O
16	PB3	DATA3	DATA3	I/O
17	PB4	DATA4	DATA4	I/O
18	PB5	DATA5	DATA5	I/O
19	PB6	DATA6	DATA6	I/O
20	PB7	DATA7	DATA7	I/O
21	PG3	RTS0	Serial Ready To Receive	O
22	PG4	CTS0	Serial Clear To Send	I
23	VCC_33		Power(3.3V)	-
24	VCC_33		Power(3.3V)	-

TTL

JP2				
#	NAME1	NAME2	FUNCTION	I/O
1	GND		Ground	-
2	GND		Ground	-
3	RESET -		Reset Active Low	I
4	PEN -		For Factory Use	I
5	PF0	ADDR0	Address 0	O
6	PF1	ADDR1	Address 1	O
7	PF2	ADDR2	Address 2	O
8	PF3	ADDR3	Address 3	O
9	PF4	ADDR4	Address 4	O
10	PF5	ADDR5	Address 5	O
11	PF6	ADDR6789	Address 6-9	O
12	PF7	CS_CF	Chip Select PCMCIA/CF	O
13	GND		Ground	-
14	GND		Ground	-
15	PD6	RESET_CF	Reset PCMCIA/CF	O
16	PD7	ATTR_WR	Attribute Write	O
17	PD4	IO_RD	IO Read	O
18	PD5	IO_WR	IO Write	O
19	PD2	RXD1	For Factory Use	I
20	PD3	TXD1	For Factory Use	O
21	PD0	WAIT_CF	Wait PCMCIA/CF	I
22	PD1	CD_CF	Card Detect	I
23	VCC_33		Power(3.3V)	-
24	VCC_33		Power(3.3V)	-

TTL

PD0 – PD7

3.3.

EZL-80

가

PCMCIA

CF

PCMCIA

CF

3.3V 16 bit PC card(PCMCIA)

CF card

, Intersil

PRISM 2.5

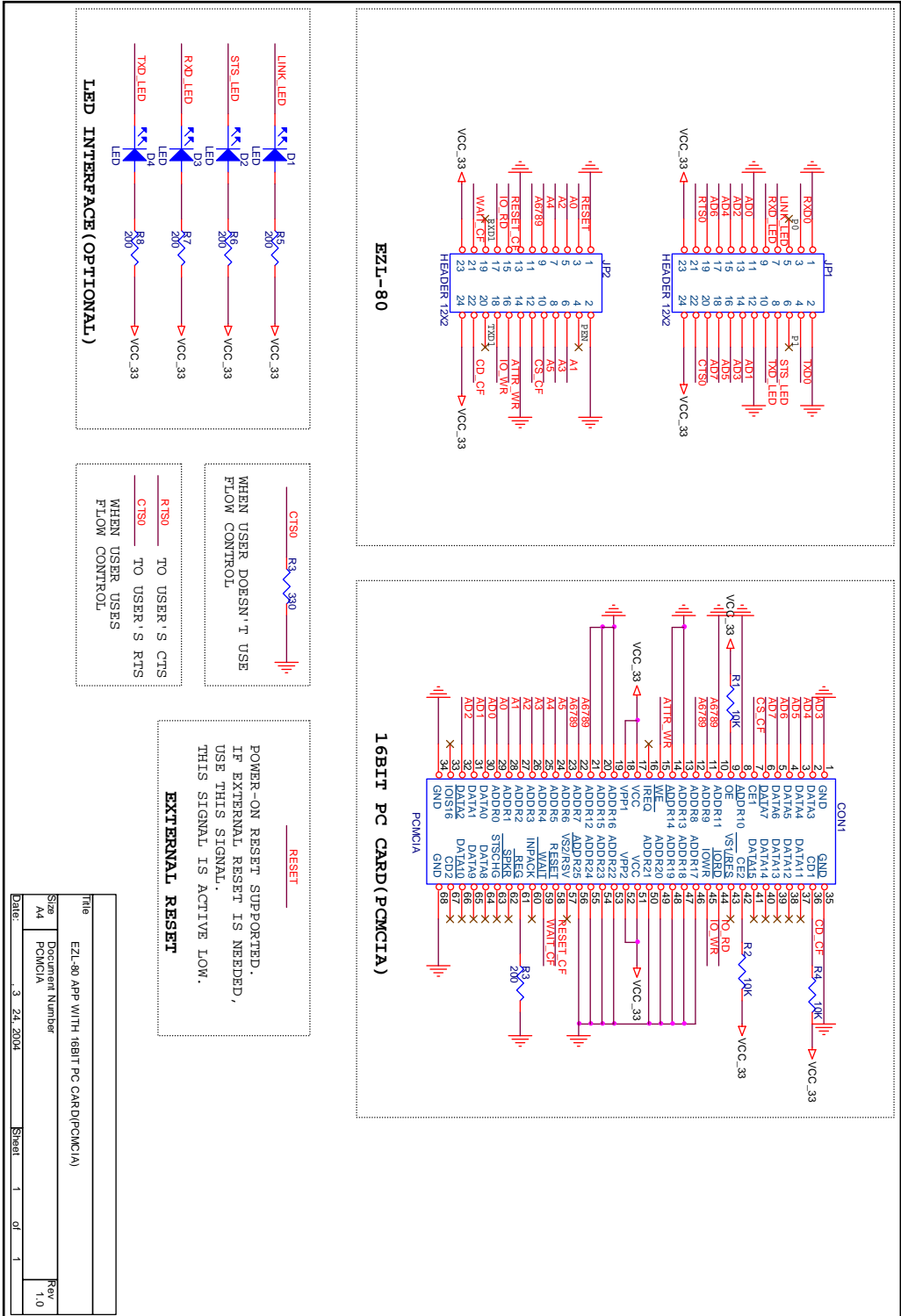
PRISM 3.0

PCMCIA

CF

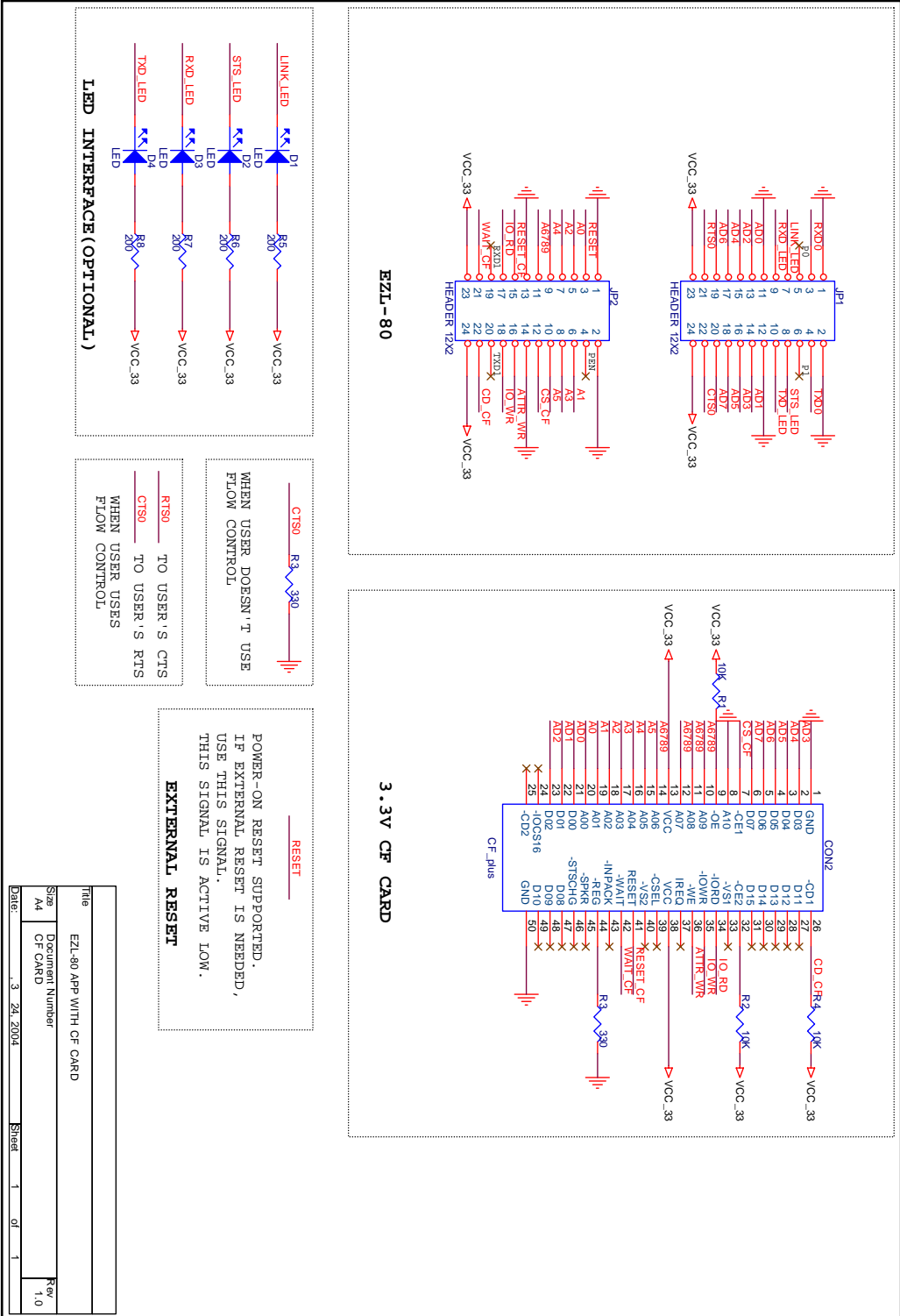
(<http://www.eztcp.com>)

3.3.1. 16bit PC



Title	EZL-80 APP WITH 16BIT PC CARD(PCMCIA)	
Document Number	PCMCIA	
Size	A4	Rev 1.0
Date	3/24/2004	Sheet 1 of 1

3.3.2. CF

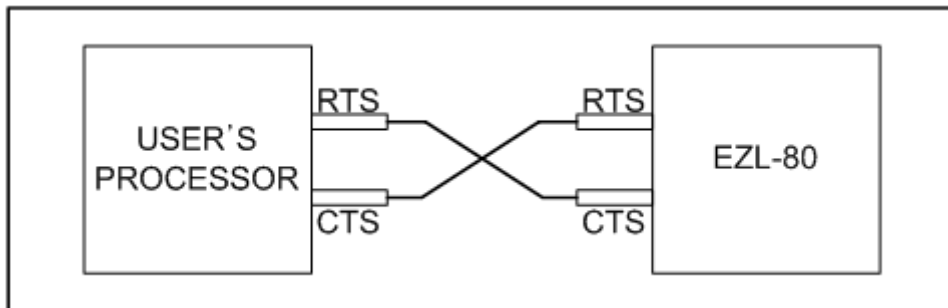


3.4.

3.3V TTL, UART(Universal Asynchronous Receiver and Transmitter) 가 .

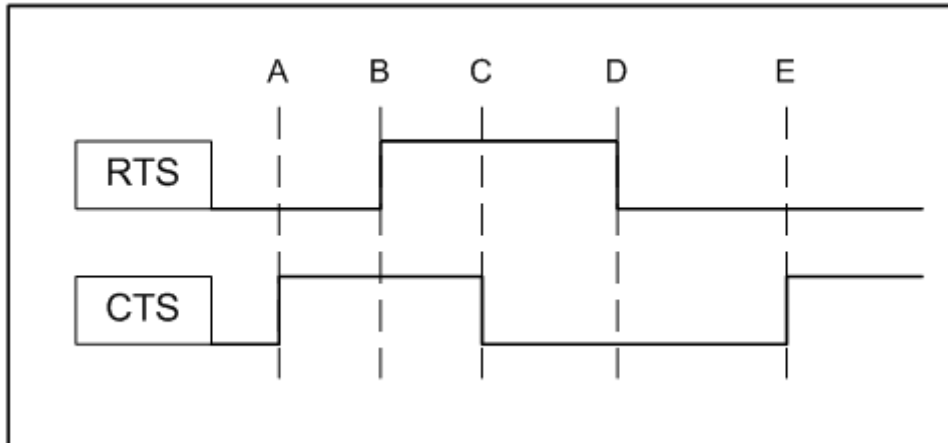
3.4.1.

가 , 가 , 가 .(EZL-80 2K , 1K 가 .) EZL-80 RTR(Ready To Receive)-CTS(Clear To Send) . RTS(EZL-80 RTR RTS .) , EZL-80 가 RTS (active low) , CTS , CTS RTS EZL-80



3.4.2.

(EZL-80 가 .)



	RTS,CTS	LOW	EZL -80
가			
A		가	가
EZL -80			
B	EZL -80	가	
C		가	가
EZL -80		가	
D	EZL -80	가	
가			
E		가	EZL -80
가			CTS가

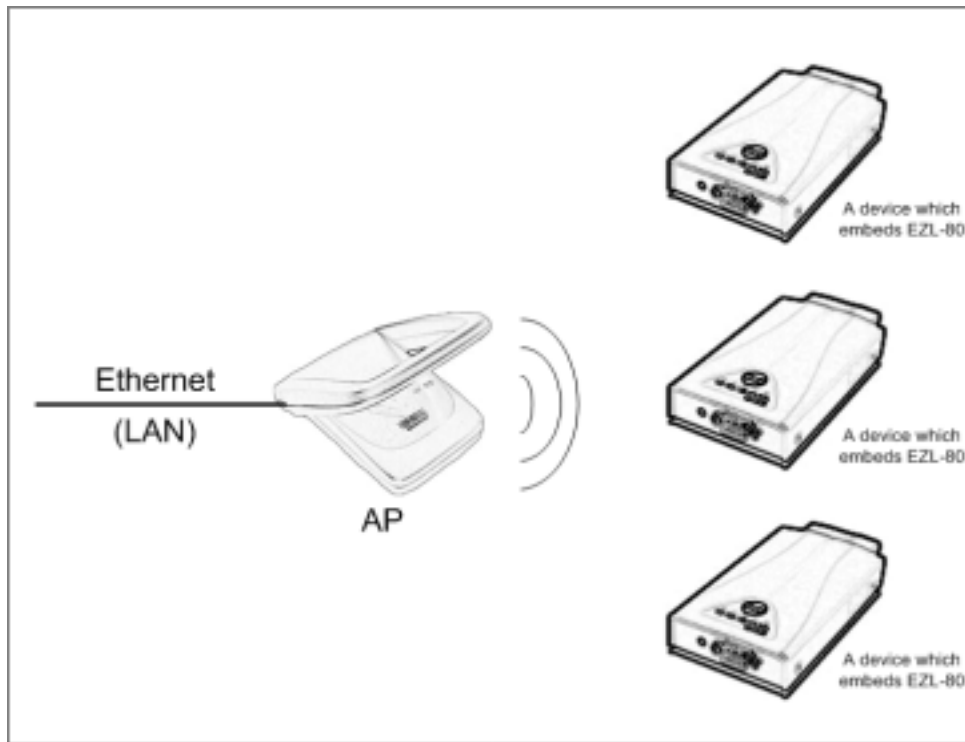
3.4.3.

가 EZL -80
 RXD, TXD, GND
 ezConfig ezSerialConfig

4.

4.1.

4.1.1. Infrastructure



infrastructure

()

AP(Access Point)

. infrastructure

AP

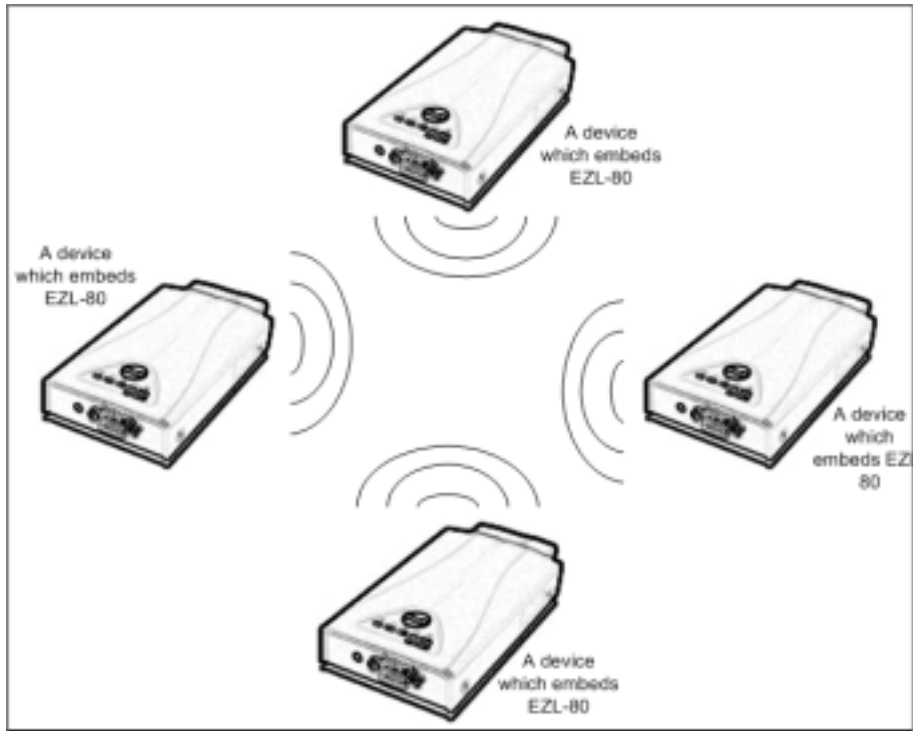
가

/

가

.

4.1.2. Ad-hoc



ad-ad-hoc AP

AP

가

peer-to-peer

4.2.

4.2.1. SSID

AP ID SSID

, Infrastructure AP SSID EZL-80 AP SSID AP SSID

, EZL-80 가 AP SSID

SSID 32 , ASCII

4.2.2. Channel

AP

4.2.3. WEP

WEP key
WEP key 64 128 가

4.3.

ezSerialConfig

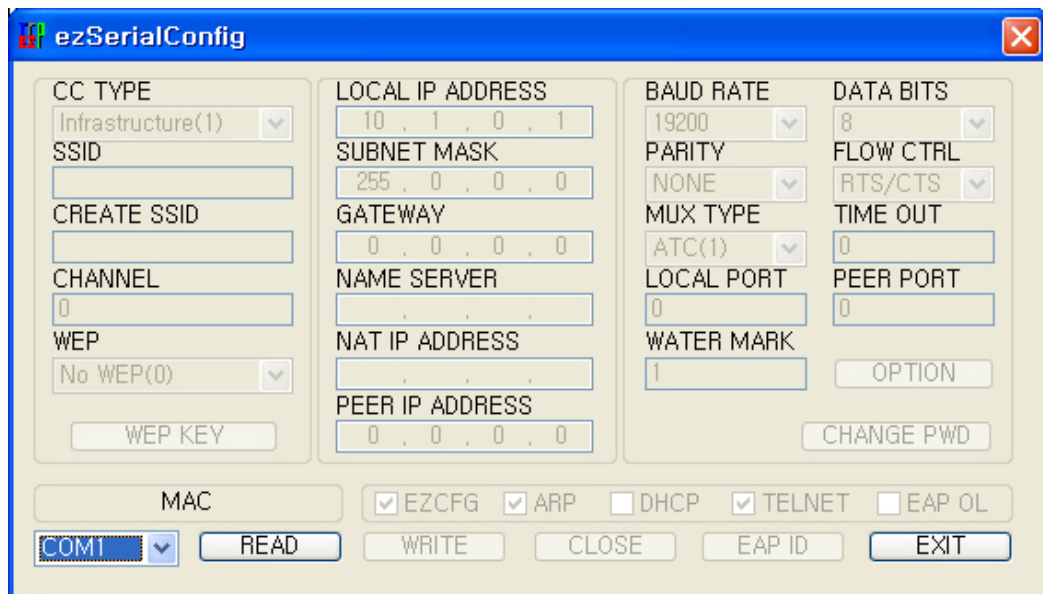
ezSerialConfig

가

가

ezSerialConfig

IP



ezSerialConfig EZL - 80

1. PC ezSerialConfig .
2. 가 EZL - 80 PC
3. 가 ..
PC COM [READ]
4. ezSerialConfig .
 (EZL - 80
 ezConfig .)
5. ezSerialConfig [WRITE] .

4.3.1. CC TYPE

가
(infrastructure) (ad-hoc)

4.3.2. SSID

AP SSID ad-hoc SSID .

4.3.3. CREATE SSID

Ad-hoc ad-hoc SSID .

4.3.4. CHNNEL

AP가 channel .

4.3.5. WEP

WEP WEP , WEP KEY
KEY .

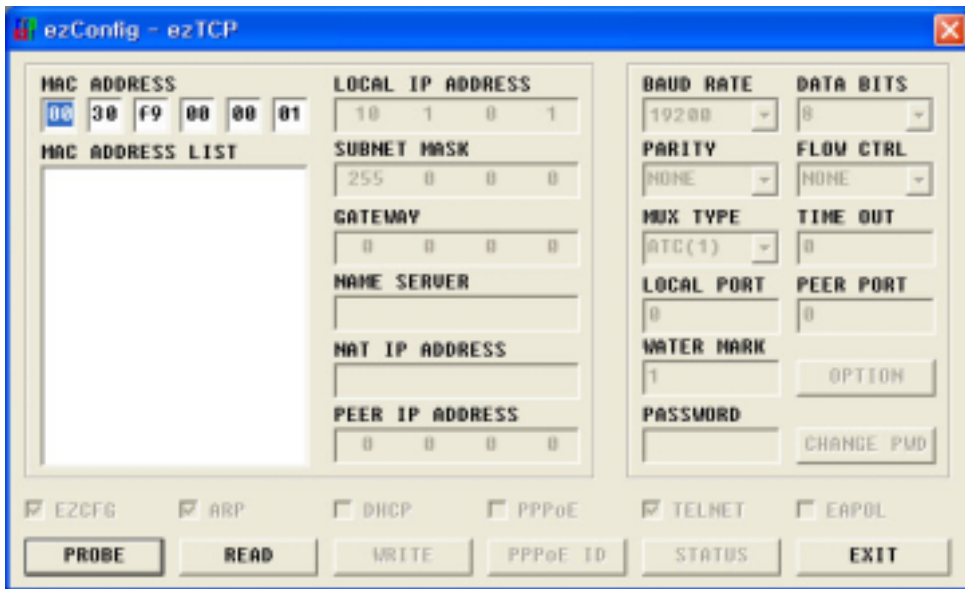
4.3.6.

‘5.1 [ezConfig](#)’

5. IP

5.1. ezConfig –

EZL - 80 (IP ,)
 ezConfig 가 .
 ezConfig Microsoft Windows (Windows 98, 98SE, 2000 pro, ME, XP
 pro/home)
 ezConfig .



ezConfig EZL - 80
 ezTCP .

ezConfig .

5.1.1. ezConfig

- [PROBE] EZL - 80
 ezTCP MAC ADDRESS LIST .

ezTCP ezTCP MAC ADDRESS ,

- [READ] MAC ADDRESS ezTCP

6 16 ,

ezTCP .

ezTCP가 LIST

- [WRITE] ezTCP
- ezTCP

- [EXIT] ezConfig . ESC
- ezConfig가 .

- [CHANGE PWD] ezTCP

가 , ezTCP

PASSWORD

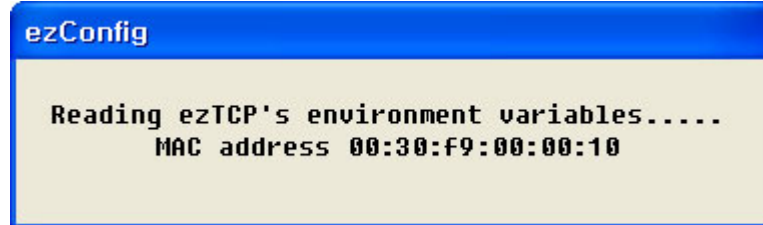
- [STATUS] ezTCP
- IP /
- MAC ADDRESS LIST

5.1.2. ezConfig

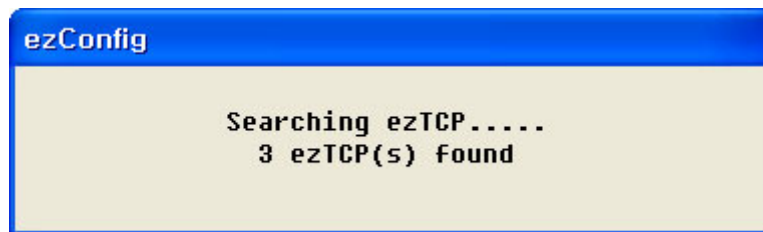
ezTCP

ezTCP

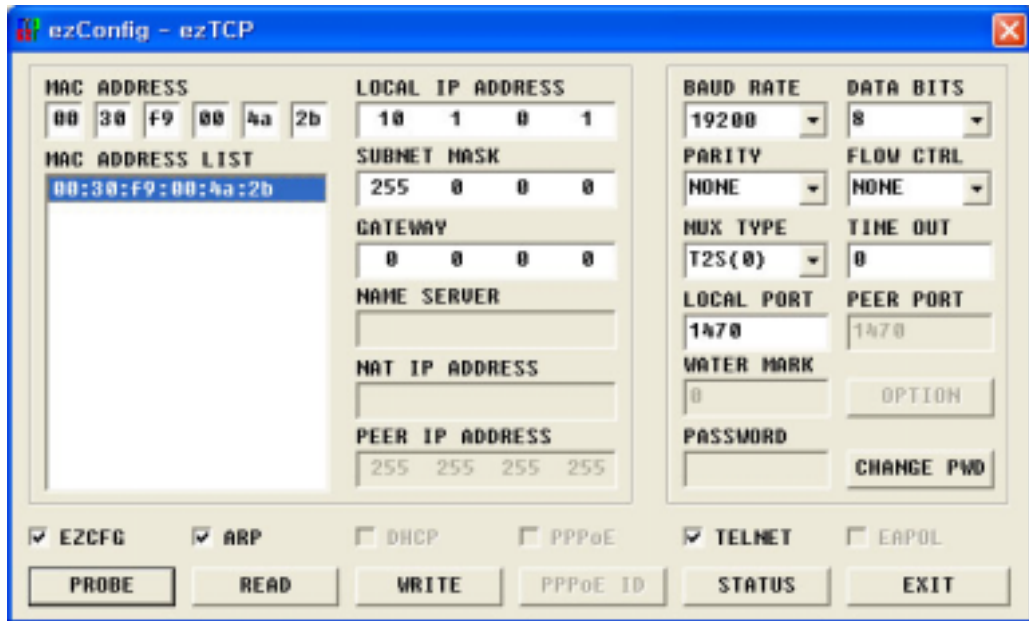
1. ezTCP STS LINK
ezConfig [PROBE] [READ]



2. ezTCP ezTCP 가 가
ezTCP 가 ezTCP
[PROBE] [READ]



3. 1 ezTCP 가 ezConfig [MAC ADDRESS LIST]
MAC ADDRESS 가 [MAC ADDRESS LIST]
MAC ADDRESS MAC ADDRESS 가
ezConfig



4. ezConfig [MUX TYPE] [LOCAL IP ADDRESS], [LOCAL PORT], [WRITE]

ezTCP
가 ezTCP

5. PING ezTCP IP 가
ezTCP IP 가
PING "Request timed out"
가 IP

```
C: \>ping a.b.c.d
Pinging a.b.c.d with 32 bytes of data:
Reply from a.b.c.d: bytes=32 time=1ms TTL=64
Reply from a.b.c.d: bytes=32 time=1ms TTL=64
Reply from a.b.c.d: bytes=32 time=1ms TTL=64
Reply from a.b.c.d: bytes=32 time=1ms TTL=64
```

- ☞ ezSerialConfig
- ☞ IP , , '7. [Normal](#)'
- ☞ ezConfig (<http://www.eztcp.com>)

5.2. ezSerialConfig –

- ezSerialConfig EZL - 80 ezConfig
- ezSerialConfig EZL - 80 가
- ☞ ezSerialConfig '4.3 [_____](#)'

6.

6.1.

EZL - 80 Normal , , ISP 가

Normal	- TCP/IP	ezConfig	
		ezSerialConfig	
ISP	EZL - 80	wflash	

6.2.

EZL - 80 가 Normal ,
가 ISP .

6.3. ()

EZL - 80

1. PC ezSerialConfig .
2. 가 EZL - 80 PC
가 ..
3. EZL - 80 COM [READ] .
4. ezSerialConfig .
 (EZL - 80
ezConfig .)
5. ezSerialConfig [WRITE] .

6.4. ISP ()

ISP EZL - 80

1. PC wflash
2. [Download]
3. 가 EZL - 80 PC
4. 가 가

6.5. Normal

Normal EZL - 80
EZL - 80 가 Normal

Normal T2S, ATC, COD, U2S 4가
. 4가

			S/W		
T2S	TCP			가	1:1
ATC	TCP	/		가	1:1
COD	TCP			가	1:1
U2S	UDP			가	N:M

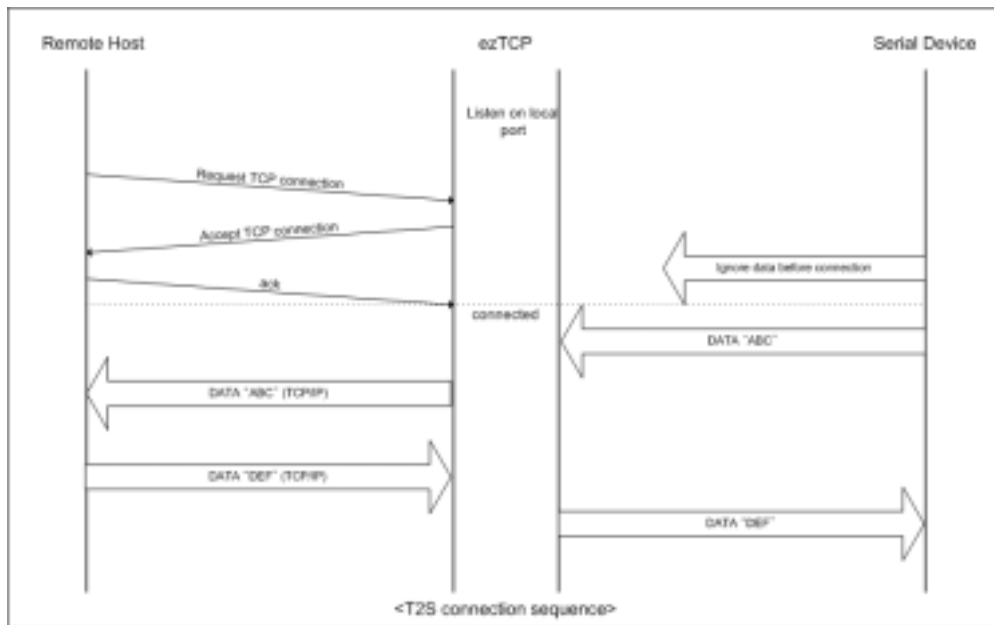
TCP 1:1
, () , ()
)
UDP UDP
가



7. Normal

7.1. T2S

T2S ezTCP가
 ezTCP local port TCP
 TCP (accept) ezTCP가 TCP
 TCP/IP TCP/IP
 TCP/IP
 .(TCP .)
 T2S ezTCP가 IP (DHCP)



T2S

IP	LOCAL IP ADDRESS	ezTCP IP
	SUBNET MASK	
	GATEWAY	
	LOCAL PORT	
	PEER IP ADDRESS	-
	PEER PORT	-
	BAUD RATE	(bps)
	DATA BITS	
	PARITY	
	FLOW CTRL	
	MUX TYPE	T2S(0)
/	WATER MARK	-
	TIMEOUT	(:)
	EZCFG	ezConfig
	ARP	ARP IP
IP	DHCP	-

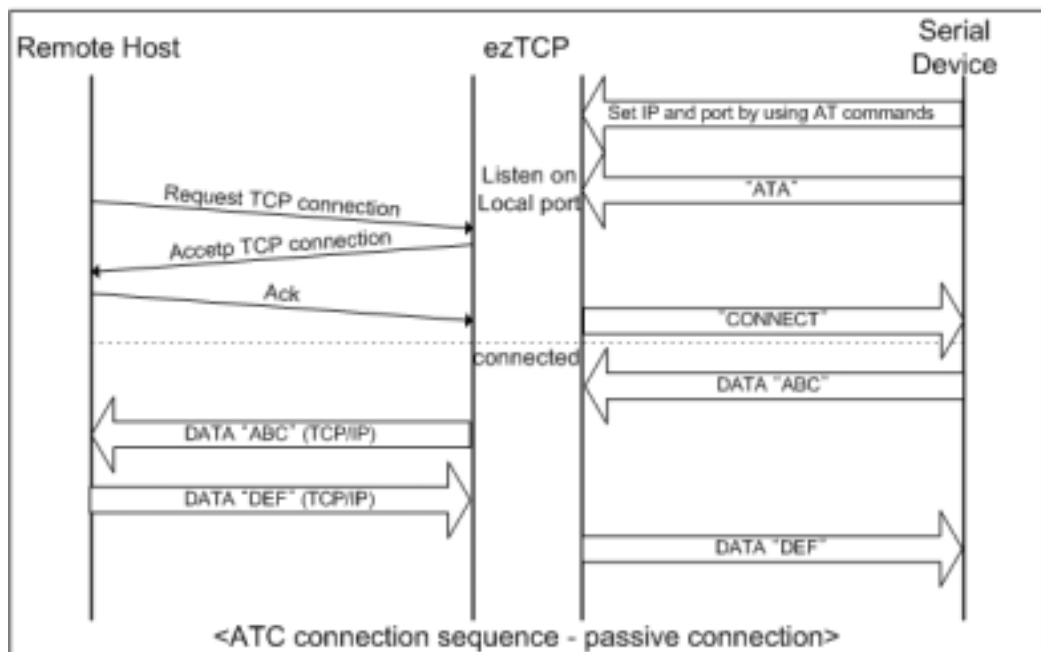
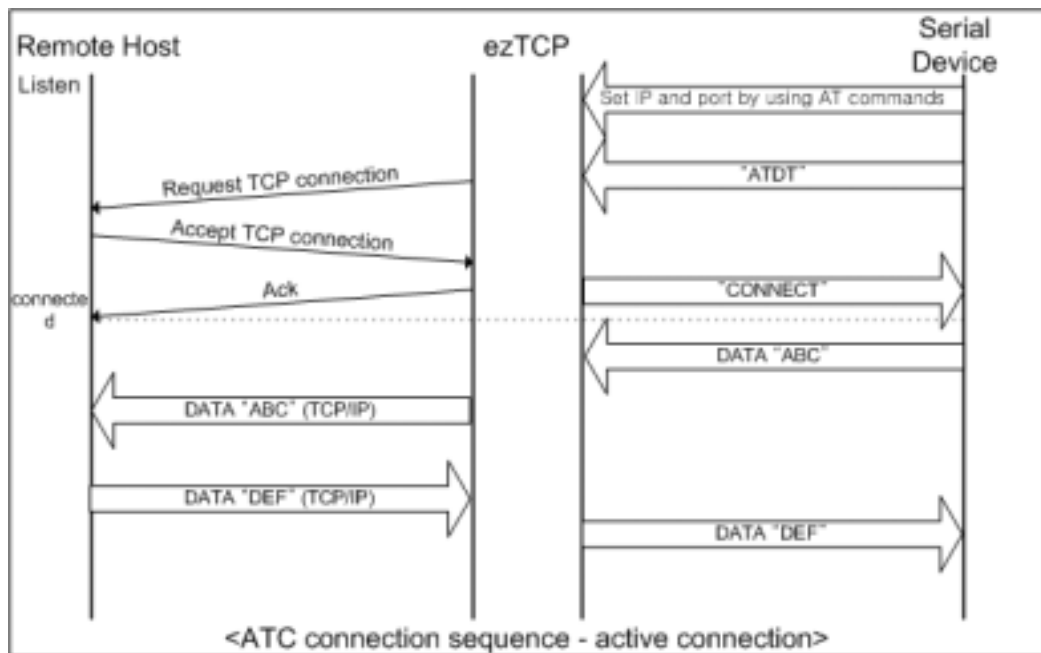
7.2. ATC

ATC AT ezTCP

 , ATC TCP

ATC AT IP

 , TCP



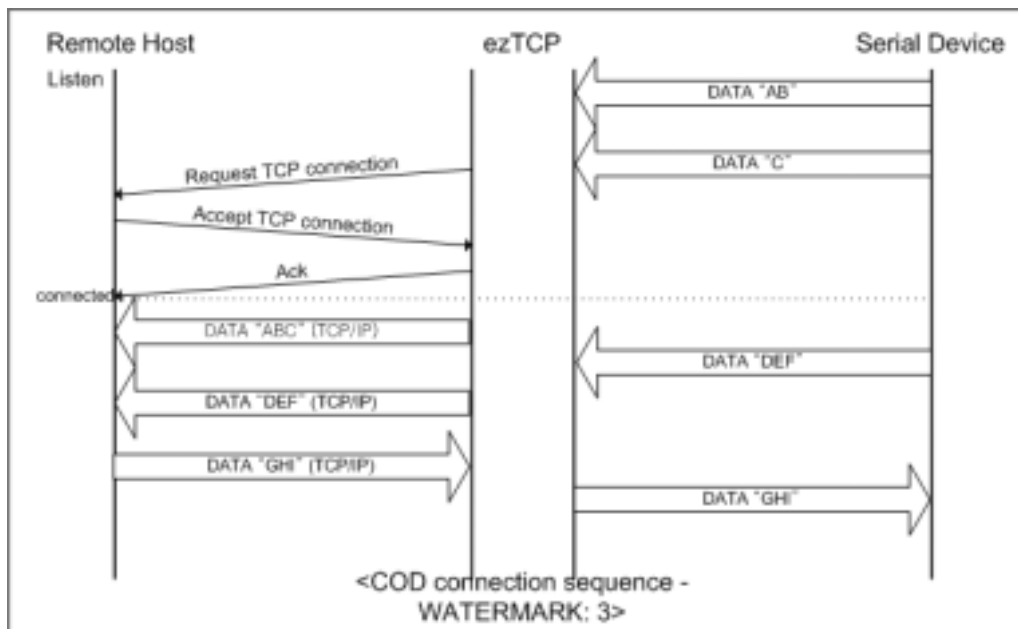
ATC

IP	LOCAL IP ADDRESS	ezTCP IP
	SUBNET MASK	
	GATEWAY	
	LOCAL PORT	
	PEER IP ADDRESS	IP
	PEER PORT	
	BAUD RATE	(bps)
	DATA BITS	
	PARITY	
	FLOW CTRL	
	MUX TYPE	ATC(1)
/	WATER MARK	-
	TIMEOUT	
	EZCFG	ezConfig
	ARP	ARP IP
IP	DHCP	ezTCP IP DHCP

AT

7.3. COD

COD ezTCP가
 [WATER MARK] 가
 ezTCP [PEER IP ADDRESS] TCP [PEER
 PORT] TCP TCP
 TCP
 TCP/IP
 TCP/IP TCP/IP



COD

IP	LOCAL IP ADDRESS	ezTCP IP
	SUBNET MASK	
	GATEWAY	
	LOCAL PORT	-
	PEER IP ADDRESS	IP
	PEER PORT	
	BAUD RATE	(bps)
	DATA BITS	
	PARITY	
	FLOW CTRL	
	MUX TYPE	COD(2)
/	WATER MARK	
	TIMEOUT	(:)
	EZCFG	ezConfig
	ARP	ARP IP
IP	DHCP	DHCP IP (IP)

7.4. U2S

U2S UDP
UDP

ezTCP

ezTCP

[WATER MARK]

가

[TIMEOUT]

UDP

[TIMEOUT] 10ms

[TIMEOUT] 2

20ms - 30ms

UDP

(multicast)

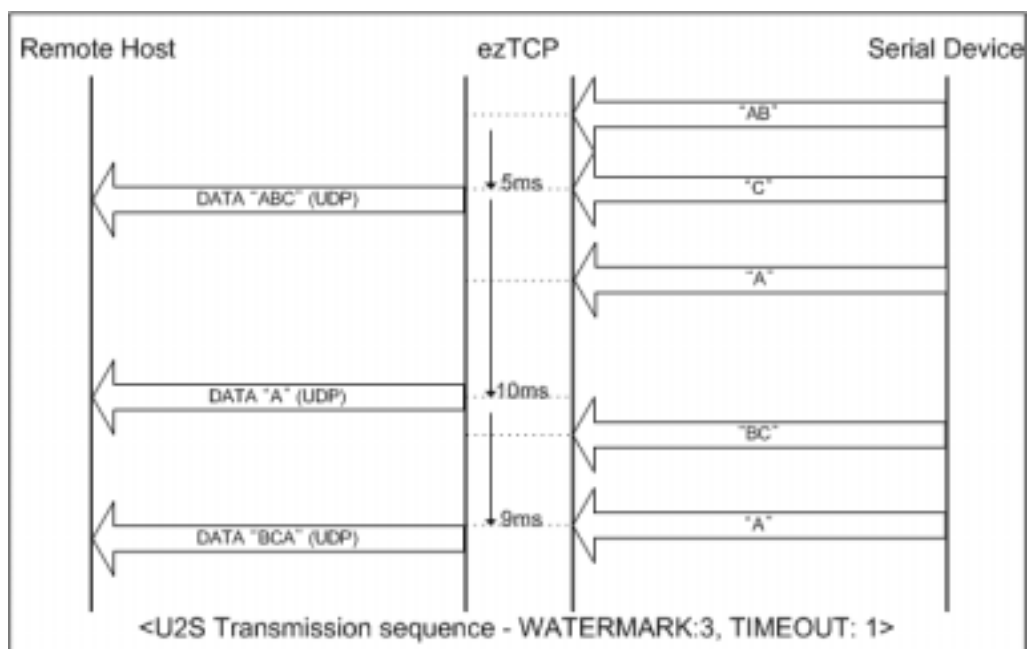
(broadcast)

N:M

RS485

DHCP

U2S



U2S

IP	LOCAL IP ADDRESS	ezTCP IP
	SUBNET MASK	
	GATEWAY	
	LOCAL PORT	UDP
	PEER IP ADDRESS	UDP IP
	PEER PORT	UDP
	BAUD RATE	(bps)
	DATA BITS	
	PARITY	
	FLOW CTRL	
	MUX TYPE	U2S(3)
/	WATER MARK	
	TIMEOUT	(10m)
	EZCFG	ezConfig
	ARP	ARP IP
IP	DHCP	-

H	off-hook	
I	Inquery	ezTCP
O	Online	Online
V	enable result code	(-V0, -V1)
Z	reset	

8.3. AT

+PLIP	local IP address	
+PSM	subnet mask	
+PGIP	default router	
+PLP	listening TCP port	
+PTO	timeout	
+PRIP	Remote machine IP address	
+PRP	Remote machine TCP port	
+PWP	Write configuration	
+PRC	ezConfig	ON: 1, OFF: 0
+PARP	ARP IP	ON: 1, OFF: 0
+PDC	DHCP	ON: 1, OFF: 0

8.4.

ATC

AT
TCP 가 AT
. TCP AT
AT

	TCP , AT
	TCP , TCP/IP

8.4.1.

+++
+++ +++

' + '	500ms
' + '	0~500ms
' + '	500ms

8.4.2.

TCP , ATO

8.5. AT

AT+PLIP=192.168.1.200<CR>		LOCAL IP
OK<CR><LF>		OK
AT+PGIP=192.168.1.254<CR>		GATEWAY IP
OK<CR><LF>		OK
AT+PSM=255.255.255.0<CR>		SUBNET MASK
OK<CR><LF>		OK
AT+PLP=1470<CR>		LOCAL PORT
OK<CR><LF>		OK
AT+PTO=10<CR>		TIME OUT
OK<CR><LF>		OK
AT+PWP<CR>		EEPROM ()
OK<CR><LF>		OK
NO CARRIER<CR><LF>		

8.6.

8.6.1.

	AT+PRIP=192.168.1.201<CR>		IP
	OK<CR><LF>		OK
	AT+PRP=1470<CR>		PORT
	OK<CR><LF>		OK
	ATDT<CR>		
	CONNECT<CR><LF>		TCP
/			

8.6.2.

	AT+PLP=1470<CR>		LOCAL PORT
	OK<CR><LF>		OK
	ATA<CR>		
가			
	CONNECT<CR><LF>		TCP OK
/			

8.7.

8.7.1.

EZL - 80

/ (TCP)			
	[guard time] + + + [guard time]		

	<CR><LF>OK<CR><LF>		
	ATH		TCP
	OK<CR><LF>		TCP

8.7.2.

가

	/ (TCP)		
	가		
	NO CARRIER<CR><LF>		TCP

9. / /

9.1.

FAQ

/ email .

: <http://www.sollae.co.kr/Support>

email : support@sollae.co.kr

9.2.

9.2.1.

2

9.2.2. A/S

1

가

· ,

·

9.2.3. A/S

(1)

9.3.

·

·

·

가

·

reverse engineering

·

·

·

·

·

·

가 , 가 가
 가
 , , , , , , , ,
 ,
 , , , , , , , ,