

Revision information for E10M_nnn.exe firmware

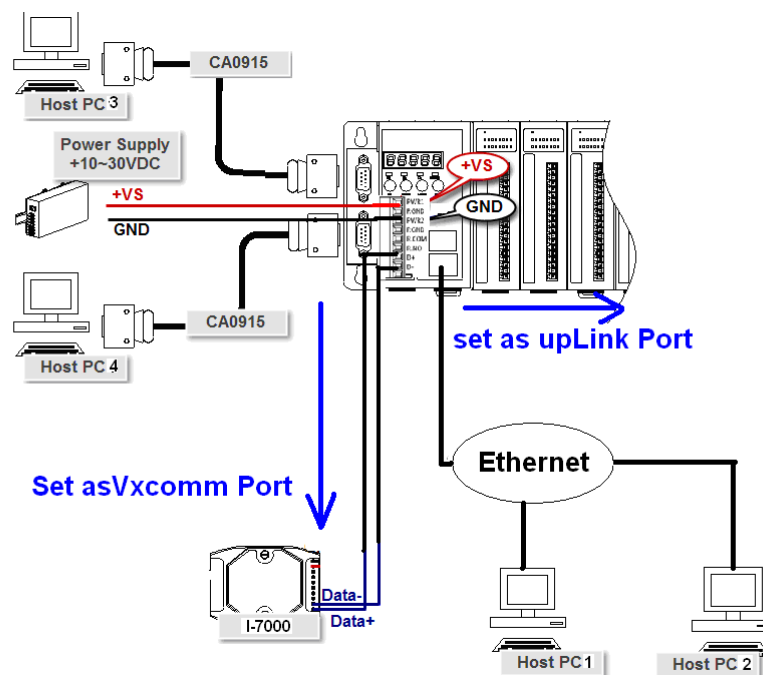
Last update:

Model	Interface	SRAM required	CPU speed	Version
I-8430,I-8830 I-8431,I-8831	Ethernet	512K bytes	40MHz	A4.xx
I-8KE4,I-8KE8 I-8431-80,I-8831-80	Ethernet	512K bytes	80MHz	A4.xx

A5.04[2014-Dec-11] by Martin

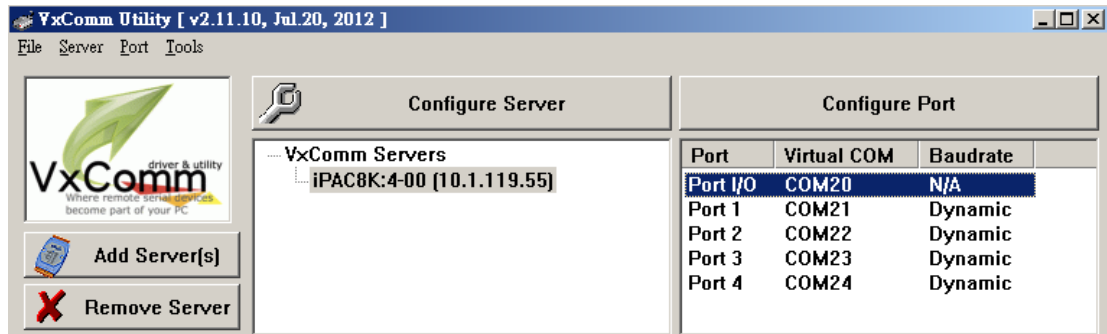
New support:

In DCON firmware version 504 or later version, users can set i-8431/i-8831 COM1/ COM3/COM4 as uplink Port or Vxcomm Port. When COM Port set as Vxcomm Port, use can configure remote I/O modules on this i-8431/i-8831 COM Port. When COM Port set as uplink Port, user can configure backplane I/O modules via i-8431/i-8831 COM1//COM3/COM4. And it support multi-users to configure backplane I/O modules in the same time; In previous DCON firmware, i-8431/i-8831COM3/COM4 only can be as Vxcomm COM Port.

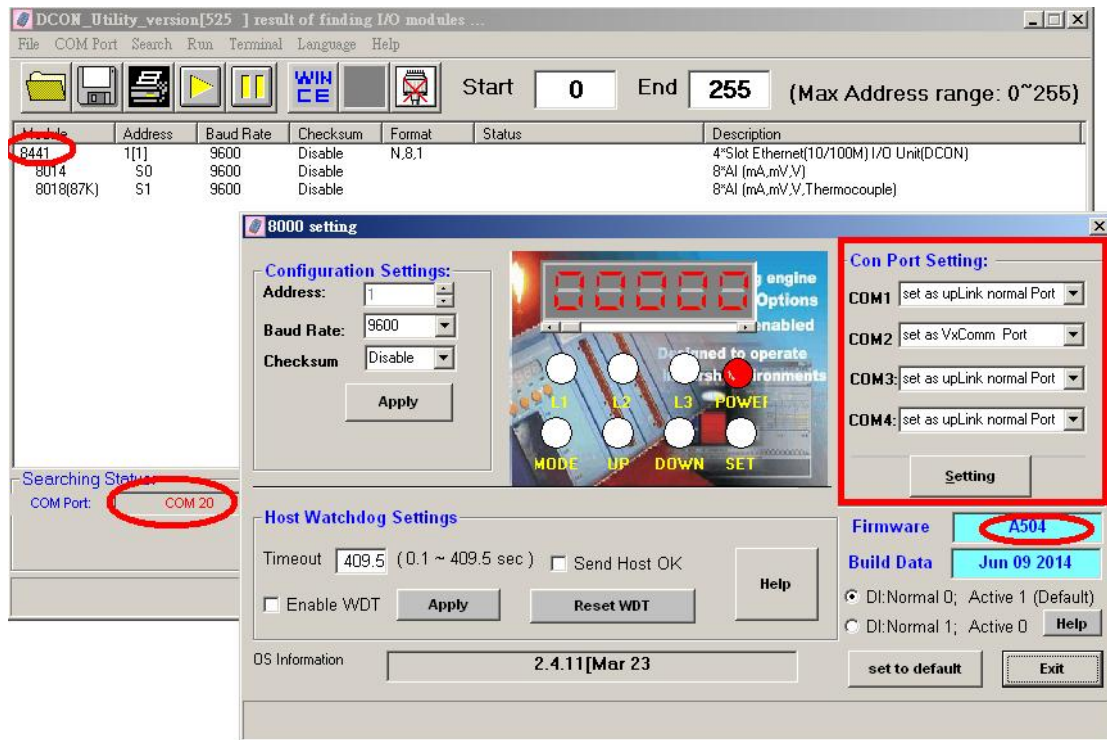


For example:

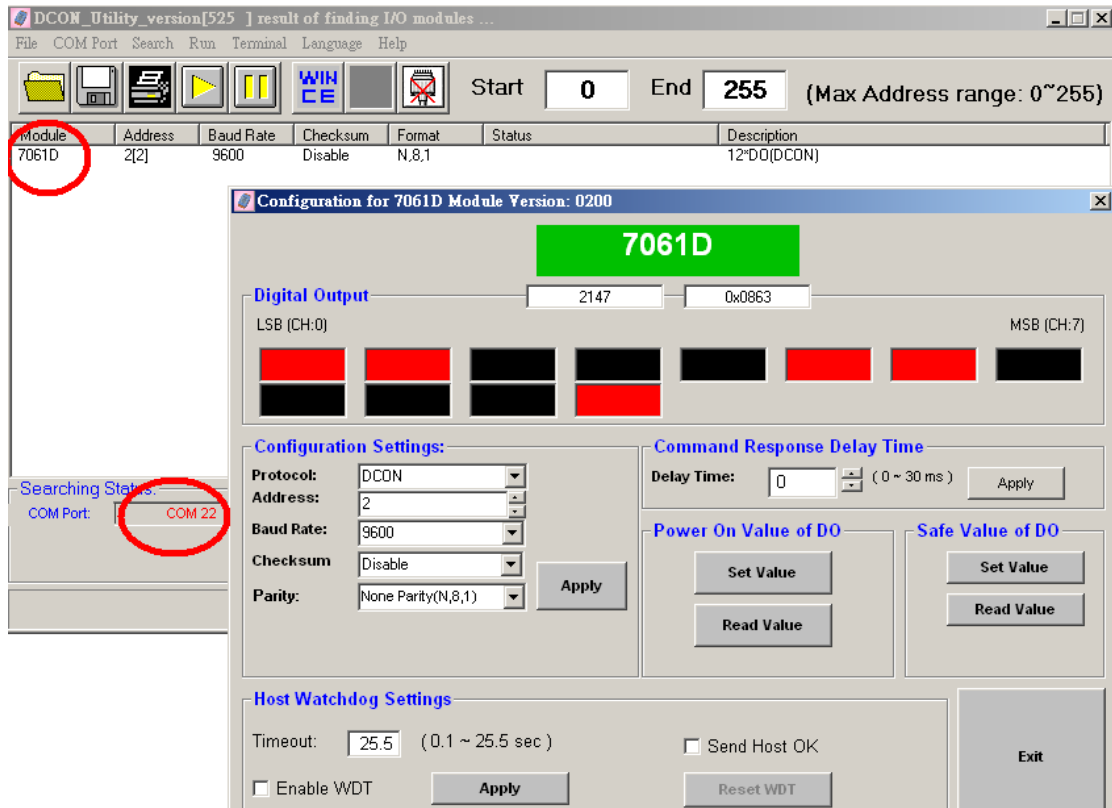
We can use Vxcomm Utility to map Virtual COM Port for all COM Port as below:



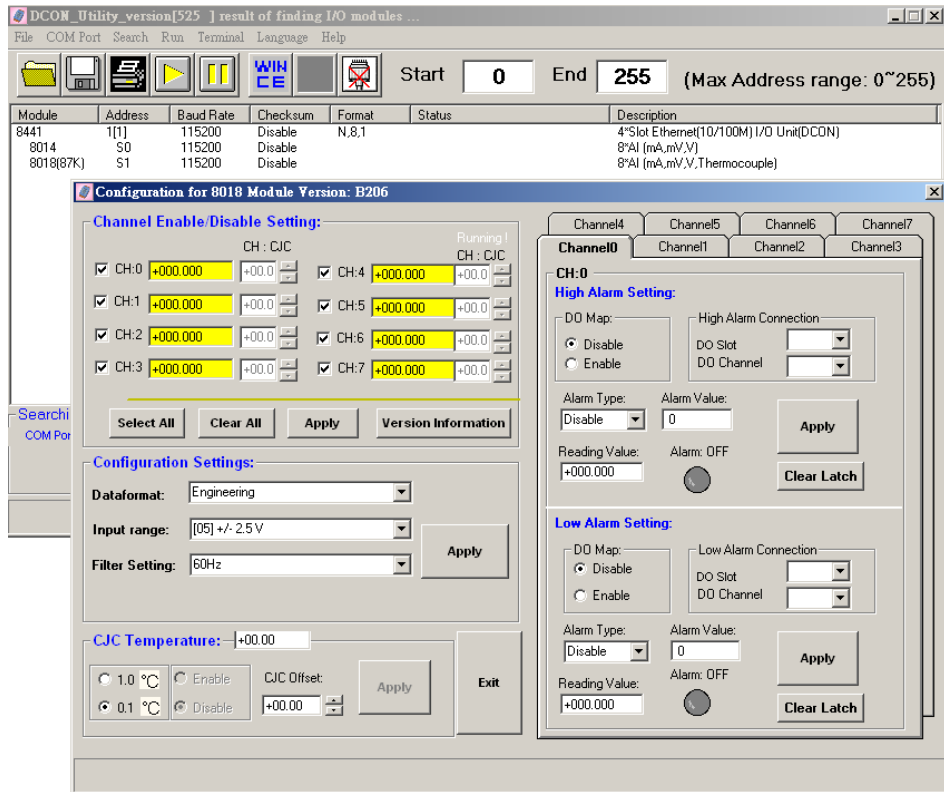
We can set some of COM for uplink Port and some for Vxcomm Port from COM20 as below:



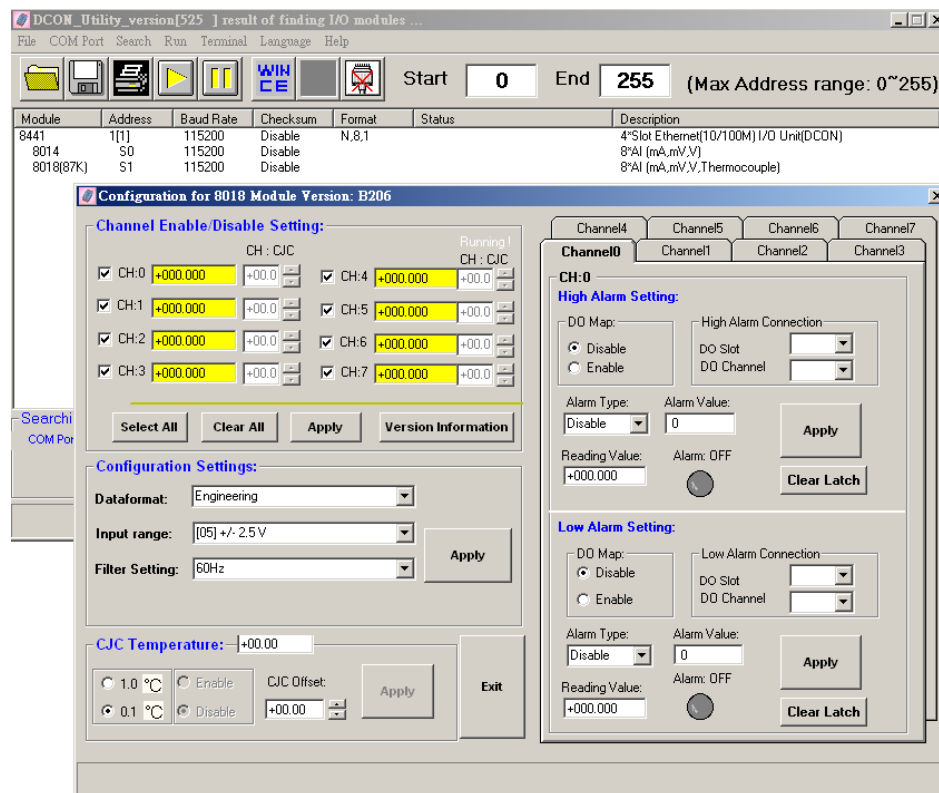
Host PC 1 can configure I-7061D on iP-8441 COM2 via Virtual COM Port 22:



Host PC 3 can configure backplane I/O module via iP-8441 COM3



Host PC 4 also can configure backplane I/O module via iP-8441 COM2



Modifications:

None

Bug Fixes:

Fixed the bug that I-8015 (I-87015) , I-8018 (I-87018) and I-8019 (I-87019) can't set as hex data format

DCON Utility:

Must be version 5.2.4 or later

OS image:

Must be version C837_2M_UDP-20090603.img or later

About support module list , please refer below:

[I-8K high profile modules inserted in iPAC-8000 system](#)

[I-87K high profile modules inserted in iPAC-8000 system](#)

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A4.39[2011-Dec-20] by Martin

New support:

1. I-8017HCW
2. I-8017DW

Note: DCON Utility must be V522 to support I-8017HCW (display as 8017C) and I-8017DW (display as 8017D)

Modifications:

None

Bug Fixes:

1. Can not configure I-87015P
2. When analog input module get response data as ">-0000", DCON firmware does not response data correctly.
3. Update I-8084W.lib for E100M_nnn.exe and D80_nnn.exe, can not clear counter correctly when Counter mode is Up/Down, Dir/Pulse, A/B phase.
4. When I-87024 set type code as 4~20 mA, the 7-Segment LED will show "dErr + slot index" error

DCON Utility:

Must be version 5.2.2 or later

OS image:

40Hz CPU : must be version 8000_UDP-20091208.IMG or later

80Hz CPU : must be version C836_UDP-20091208.IMG or later

About support module list , please refer below:

[I-8K low profile modules inserted in i-8000 system](#)

[I-8K high profile modules inserted in i-8000 system](#)

[I-87K low profile modules inserted in i-8000 system](#)

[I-87K high profile modules inserted in i-8000 system](#)

A4.37[2011-Nov-11] by Martin

New support:

None

Modifications:

None

Bug Fixes:

1. Can not configure I-87015P
2. When analog input module get reponse data as ">-0000", DCON firmware does not reponse data correctly.
3. Update 8084W.lib for E100M_nnn.exe and D80_nnn.exe, can not clear counter correctly when Counter mode is Up/Down, Dir/Pulse, A/B phase.

DCON Utility:

Must be version 5.1.7 or later

OS image:

Must be version C837_2M_UDP-20090603.img or later

About support module list , please refer below:

[I-8K low profile modules inserted in i-8000 system](#)

[I-8K high profile modules inserted in i-8000 system](#)

[I-87K low profile modules inserted in i-8000 system](#)

[I-87K high profile modules inserted in i-8000 system](#)

A4.35[2010-Feb-10] by Martin

New support:

I-8088W,I-8093W

Modifications:

None

Bug Fixes:

None

DCON Utility:

Must be version 5.1.7 or later

OS image:

40Hz CPU : must be version 8000_UDP-20091208.IMG or later

80Hz CPU : must be version C836_UDP-20091208.IMG or later

A4.16[2008-Jun-1] by Martin

Fix Bug:

1. fix NetID error in the 8KEx controller

A4.01[2007-Dec-13] by Martin

New support:

1. i-8144,i-8142,i-8114,i-8112

Note:

1. The os image must update to 8000_UDP_20080331 for 40M CPU
2. The os image must update to C836_UDP-20071015.img for 80M CPU (8KE4/8KE8)
3. If os image earlier than 2006-09-01 then the 5-digital LED will always show dErr0,
and can not work, user must update os image later than 2006-09-01.
4. It can update firmware on line with MiniOS7 Utility via TCP connection
5. The eeprom configurations for A4.00 are different from earlier version.
6. For multi serial port modules' test result :

How many ports can be run in the multi serial port modules using the Firmware ?

(Baudrate 115200)

Module:	8114 only		8114+8K module		8114+87K module	
	C831	C836	C831	C836	C831	C836
8 port:	X	OK	X	X	X	X
6 port:	X	-	X	OK	X	X
4 port:	OK	-	OK	-	X	OK
2 port:	-	-	-	-	OK	-

===== Relative Information =====

DCON Utility:

CD:\Napdos\Driver\DCON_Utility

MiniOS7 Utility:

CD:\Napdos\MiniOS7\utility\MiniOS7_utility

MiniOs7 image:

for 40MHz CPU ==> 8000_UDP_20071015.img

CD:\Napdos\DCON\8430_8830\OS_Image\40MHz

for 80MHz CPU ==> C836_UDP-20071015.img
CD:\Napdos\DCON\8430_8830\OS_Image\80MHz

A3.09[2007-Nov-16] by Martin

Modify:

1. Add \$AAB to check Build Date for frimware

Bug Fixed:

1. COM4 VxComm function can not work for firmware A3.08 runing on 40MHz CPU
2. If there are many commands be combined together(cmd1+cr+cmd2+cr...),and send to E10M_308.exe,it will cause E10M_308.exe can not response to client for a while.

A3.08[2007-Feb-14] by Martin

New support:

i-87017ML +/- 50V, +/- 150V analog input module

i-87017RC +/- 20 mA analog input module

Modify:

update the 8080L.lib v2.05 for firmware.

Change scanning mode from interrupt to DMA,for using interrupt mode to Scan 87K AI Module from COM 0 for a long time,the COM 0 will lost data sometimes.

Bug:

#AASi command for 87017R does not return cr

Note:

DCON Utility must be V4.4.2 to support i-87017ML and i-87017RC when they are inserted into the MCU.

A3.07[2006-Apr-27] by Martin

New support:

i-87082 counter/frequency module

i-8082 frequency module

i-87015 RTD Analog input module.

i-87019R Universal Analog Input Module with High Voltage Protection

i-8017HS 14-bit 100K sampling rate 8/16-channel analog input module

Modify:

1.can save module's general configurations to CPU's EEPROM.

When module has been damaged and replaced by a new one at the same slot,

the configuration will be reconvered to the previous one.

2.add the module CJC function and channel CJC funciton of i-87018.

3.update the 8080L.lib for firmware for the bug of auto scan function.

4.update the slave24.lib for firmware for the bug of i-8024 -10V voltage out when initial.

5.update the slave17.lib for firmware to support i-8017HS.

A3.06[2005-Nov-9] by Martin

Note:

This version of firmwarechange 8000L.lib to make it compatible among 80M new CPU board(V2.5),

80M V1.2 CPU board and 40M CPU board.

Note 1: the old 8000L.lib can not apply to the new CPU board(V2.5) if application

need use COM3 or COM4 function(for E10M_nnn.exe it means the VxComm of COM3 and COM4)

Note 2: the old os image for 80M CPU(for example 8e050902.img)can not be used on

the new CPU board(V2.5 or above)

Note 3: the new os image for 80M CPU(for example 8000E-80-20051103.img)can be used on

both the V2.5 and V1.2 CPU board.

CPU board	Firmware (A3.05)	Firmware (A3.06)	(os) 8k0902.img	(os) 8e0902.img	(os) 8000E-80-20051103.img
40M	Yes	Yes	Yes	No	No
80M (V1.2)	Yes	Yes	No	Yes	Yes
80M (V2.5)	No	Yes	No	No	Yes

A3.05[2005-Oct-8] by Martin

Modify:(note1)

Add new cpu command ~AAD to read DI active state.

Add new cpu command ~AADv to set DI active state.

Fix bug:

i-8080 #AASi read all channels' counter value must add '+' or '-' sign for each channel.

i-8080 \$AASi7 read all channels' overflow value must add '+' or '-' sign for each channel.

Note1: Normally the logical value of DI on i-8000 system is

when set ~AAD0 the DI state will be 1 => High(LED ON); 0 => Low(LED OFF)

when set ~AAD1 the DI state will be 0 => High(LED ON); 1 => Low(LED OFF)

A3.04[2005-Feb-24] by Martin

Modify:

E10M_nnn.exe and R232_nnn.exe are combined as E10M_nnn.exe to support

both Ethernet and RS-232 interface.

Firmware include new 8080L.lib(upgrade to version 2.01)

(for 8080L.lib revision refer to

<ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/8000>

[/841x881x/master/demo/8080/BC_Demo/8080_Version_nnn_Eng.txt](ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/8000/841x881x/master/demo/8080/BC_Demo/8080_Version_nnn_Eng.txt) or

<ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/8000>

[/841x881x/master/demo/8080/BC_Demo/8080_Version_nnn_Chi.txt](ftp://ftp.icpdas.com/pub/cd/8000cd/napdos/8000/841x881x/master/demo/8080/BC_Demo/8080_Version_nnn_Chi.txt))

A3.03[2004-Dec-27] by Martin

Modify:

Firmware include new 8080L.lib(upgrade to version 2.00)

Fix bug:

i-87041 unit's single channel bit output can not work properly.

Note:

DCON Utility must be Version 4.3.6 to support new 8080L.lib

A3.02[2004-Oct-20] by Martin

Fix bug:

i-87024 output range initializes not properly

If some of i-87013 unit's channels are disabled and use #AASi to get AI value,

then the value displayed is not properly.

A3.01[2004-Aug-05] by Martin

New support:

i-8050 universal Digital input and output module

Modify:

i-8080 #AASiCjV response data [counter value][overflow] change to
[overflow][counter value]

Note:

i7000.dll must be 5.1.2 to support i-8050 and i-8080 modified command
DCON Utility must be 4.3.3 to support i-8050 and i-8080 modified
command

A3.00 [2004-Jun-15] by Martin

New support:

i-8080 counter/frequency module.

Note:

1. for 8080 unit DCON Utility version must be 4.3.2 or above

A1.99 [Jun,15,2004] by Martin

Fix:

1. Command \$AASi5MM for 8017H get no response.(*)
2. Command \$AASiCjARRFF for 8017H get no response.(*)
3. 8K485 can not support 128k sram MCU.

Note:

(*) DCON Utility must be upgraded to ver 4.3.2

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===== Relative Information =====
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DCON Utility:

CD:\Napdos\Driver\DCON_Utility

MiniOs7 image:

for 40MHz CPU ==> 8k040330.IMG

CD:\NAPDOS\8000\843x883x\TCP\Vxcomm\Server(843x883x)\os_image\40
MHz

for 80MHz CPU ==> 8e040420.IMG

CD:\NAPDOS\8000\843x883x\TCP\Vxcomm\Server(843x883x)\os_image\80
MHz

A1.98 [May,12,2004] by Martin

Fix:

1. Command @AASiSCjjD for 8041 and 8042
single channel digital out can not work properly.
2. Can not read DI value of 8054

[Note]:These bugs exist in Version A1.96 and A1.97

3. TCP/IP connection fail for 8KE10.exe(A1.97) on 8430 and 8830 MCU

A1.97 [Apr,22,2004] by Martin

Supported:

1. 87041(command sets are the same as 8041)
2. 87040(command sets are the same as 8040)
3. di counter and latch function for all 87k DI or DI/O modules

Notes:

1. DCON Utility must be ver.4.3.0 or above
to support 87040 and 87041
and di counter and latch function for all 87k DI or DI/O modules

Fix :

1. When 87013 modules plugged into 8k mcu
the initial input range will not show in utility

A1.96 [Feb,20,2004] by Martin

Supported:

1. 87069(command sets are the same as 8068)
2. 8069(command sets are the same as 8068)

Notes:

1. DCON Utility must be ver.4.2.9 or above to support 8069,87069.

Fix:

1. When DO modules change to another slot it will get Power On Value for all channels but infact MCU does not really write power on value to the channel

A1.95 [Oct,14,2003] by Kevin

Support:

1. 8037 (command sets are same as 8057)

Note:

1. DCON Utility must update to ver. 4.2.7 to support 8037.

A1.94 [Apr,22,2003] by Kevin

Support:

1. 87026 (command sets are same as 87022)

Note:

1. DCON Utility must update to ver. 4.2.5 to support 87026.

A1.93 [Mar,06,2003] by Kevin

Support:

1. 87022 (command sets are same as 8024)

Note:

1. 7000 Utility must update to ver. 4.2.4 to support 87022.

A1.92 [Jan,20,2003] by Kevin

Fix:

1. Sends command "#AASiCj(Data)" to 87024,8024
gets error response "?AA"

Support:

1. 8077 (command sets are same as 8054)
2. 8017MP (command sets are same as 8017H)
3. 8017LP (command sets are same as 8017H)

Update:

1. 8KE10.exe update Xserver kernal to XS8_3009.Lib
to get better performance and stability.

Note:

1. 7000 Utility must update to ver. 4.2.4
to support 8077,8017MP,8017LP.
2. MiniOS7 must update to
ver 1.04 build 12, Dec,27,2003 (8n021227.img)
to support 8077,8017MP,8017LP.
3. Sends commands "\$AAT" and "\$AAT1" to get module name of
8077 ==> "77"
8017MP ==> "7M"
8017LP ==> "7L"

A1.91 [Nov,01,2002] by Kevin

Fix:

1. 87018 input range support 3 T/C type
 - (1) L-type
 - (2) M-type
 - (3) L-type (DIN43710)

Note: 7000 Utility must update to ver. 4.2.3

A1.9 [Sep,18,2002] by Kevin

Support:

1. 8040

\$AASi6 ==> !AADDDDDDDD ==> Read DI values
@AASi ==> >DDDDDDDD ==> Read DI values

2. 8041

\$AASi6 ==> !AAUUUUUUUU ==> Read back DO values
@AASi ==> >UUUUUUUU ==> Read back DO values
@AASiSCnnD ==> > ==> Set single channel of DO
nn: channel number
D: '1' ==> turn on DO bit
'0' ==> turn off DO bit
@AASiUUUUUUUU ==> > ==> Set DO values

3. 8042

\$AASi6 ==> !AAUUUUDDDD ==> Read back DO values and
DI values
(UUUU for DO, DDDD for DI)
@AASi ==> >UUUUDDDD ==> Read back DO values and
DI values
(UUUU for DO, DDDD for DI)
@AASiSCnnD ==> > ==> Set single channel of DO
nn: channel number
D: '1' ==> turn on DO bit
'0' ==> turn off DO bit
@AASiUUUU ==> > ==> Set DO values

Note:

1. 7000 Utility must update to ver. 4.2.0

A1.8 [Jul,31,2002] by Kevin

Fix:

DO values can be hold even I-8000 is reset by watch dog.

If I-8000 is reset by power, DO values can't be hold.

Note:

MiniOS7 must update to 8000 New version (8n020704.img).

prompt become 8000n> (original prompt is 8000>)

image name become 8nyymmdd.img (original name is 80yymmdd.img)

Support module list:

I-8K low profile modules inserted in i-8000 system

Module ID	DCON Utility Version	DCON Firmware version	Date
8017H	4.0.0	A1.5	1-Jan-2001
8017HS	4.4.0	A3.07	27-Apr-2006
8024	4.0.0	A1.5	1-Jan-2001
8037	4.2.7	A1.95	13-Oct-2003
8040	4.1.2	A1.9	17-Sep-2002
8041	4.1.2	A1.9	17-Sep-2002
8042	4.1.2	A1.9	17-Sep-2002
8050	4.3.3	A3.01	05-Aug-2004
8051	4.0.0	A1.5	1-Jan-2001
8052	4.0.0	A1.5	1-Jan-2001
8053	4.0.0	A1.5	1-Jan-2001
8054	4.0.0	A1.5	1-Jan-2001
8055	4.0.0	A1.5	1-Jan-2001
8056	4.0.0	A1.5	1-Jan-2001
8057	4.0.0	A1.5	1-Jan-2001
8058	4.1.0	A1.7	19-Mar-2002
8060	4.0.0	A1.5	1-Jan-2001
8063	4.0.0	A1.5	1-Jan-2001
8064	4.0.0	A1.5	1-Jan-2001
8065	4.0.0	A1.5	1-Jan-2001
8066	4.0.0	A1.5	1-Jan-2001
8068	4.0.0	A1.5	1-Jan-2001
8069	4.2.9	A1.96	20-Feb-2004
8072	-	-	-
8074	-	-	-
8077	4.2.4	A1.92	20-Jan-2003
8080	4.3.2	A3.00	15-Jun-2004
8081	-	-	-
8082	4.4.0	A3.07	27-Apr-2006

8083	-	-	-
8090	-	-	-
8091	-	-	-
8112	4.5.1	A4.01	13-Dec-2007
8114	4.5.1	A4.01	13-Dec-2007
8142	4.5.1	A4.01	13-Dec-2007
8144	4.5.1	A4.01	13-Dec-2007

I-8K high profile modules inserted in i-8000 system

Module ID	DCON Utility Version	DCON Firmware version	Date
8017HW	4.4.0	A3.07	27-Apr-2006
8017DW	5.2.2	A4.39	20-Dec-2011
8017HCW	5.2.2	A4.39	20-Dec-2011
8024W	4.0.0	A1.5	1-Jan-2001
8040W	4.1.2	A1.9	17-Sep-2002
8041W	4.1.2	A1.9	17-Sep-2002
8042W	4.1.2	A1.9	17-Sep-2002
8050W	4.3.3	A3.01	05-Aug-2004
8051W	4.0.0	A1.5	1-Jan-2001
8052W	4.0.0	A1.5	1-Jan-2001
8053W	4.0.0	A1.5	1-Jan-2001
8054W	4.0.0	A1.5	1-Jan-2001
8055W	4.0.0	A1.5	1-Jan-2001
8056W	4.0.0	A1.5	1-Jan-2001
8057W	4.0.0	A1.5	1-Jan-2001
8058W	4.1.0	A1.7	19-Mar-2002
8060W	4.0.0	A1.5	1-Jan-2001
8063W	4.0.0	A1.5	1-Jan-2001
8064W	4.0.0	A1.5	1-Jan-2001
8065W	4.0.0	A1.5	1-Jan-2001
8066W	4.0.0	A1.5	1-Jan-2001
8068W	4.0.0	A1.5	1-Jan-2001
8069W	4.2.9	A1.96	20-Feb-2004
8088W	5.1.7	A435	11-Feb-2010
8093W	5.1.7	A435	11-Feb-2010
8112W	4.5.1	A4.01	13-Dec-2007
8114W	4.5.1	A4.01	13-Dec-2007
8142W	4.5.1	A4.01	13-Dec-2007
8144W	4.5.1	A4.01	13-Dec-2007

I-87K low profile modules inserted in i-8000 system

Module ID	DCON Utility Version	DCON firmware version	Date
87005	-	-	-
87013	4.0.0	A1.5	1-Jan-2001
87015	4.4.0	A3.07	27-Apr-2006
87015T (ODM)	4.4.0	A3.07	27-Apr-2006
87016	-	-	-
87017	4.0.0	A1.5	1-Jan-2001
8017ML	4.4.2	A3.08	29-Sep-2006
8017RC	4.4.2	A3.08	29-Sep-2006
87018	4.0.0	A1.5	1-Jan-2001
87019	4.4.0	A3.07	27-Apr-2006
87022	4.2.4	A1.93	6-Mar-2003
87024	4.0.0	A1.5	1-Jan-2001
87026	4.2.5	A1.94	22-Apr-2003
87040	4.3.0	A1.97	22-Apr-2004
87041	4.3.0	A1.97	22-Apr-2004
87051	4.0.0	A1.5	1-Jan-2001
80752	4.0.0	A1.5	1-Jan-2001
87053	4.0.0	A1.5	1-Jan-2001
87054	4.0.0	A1.5	1-Jan-2001
87055	4.0.0	A1.5	1-Jan-2001
87057	4.0.0	A1.5	1-Jan-2001
87058	4.1.0	A1.7	19-Mar-2002
87063	4.0.0	A1.5	1-Jan-2001
87064	4.0.0	A1.5	1-Jan-2001
87065	4.0.0	A1.5	1-Jan-2001
87066	4.0.0	A1.5	1-Jan-2001
87068	4.0.0	A1.5	1-Jan-2001
87069	4.2.9	A1.96	20-Feb-2004
87082	4.4.0	A3.07	27-Apr-2006

I-87K high profile modules inserted in i-8000 system

Module ID	DCON Utility Version	DCON firmware version	Date
87005W	-	-	-
87013W	4.0.0	A1.5	1-Jan-2001
87015W	4.4.0	A3.07	27-Apr-2006
87016W	-	-	-
87017W	4.0.0	A1.5	1-Jan-2001
8017MLW	5.1.2	A4.22	05-Nov-2008
8017RCw	4.4.2	A3.08	29-Sep-2006
87018W	4.0.0	A1.5	1-Jan-2001
87018RW	5.1.2	A4.22	05-Nov-2008
87018ZW	5.1.2	A4.22	05-Nov-2008
87019W	4.4.0	A3.07	27-Apr-2006
87022W	4.2.4	A1.93	6-Mar-2003
87024W	4.0.0	A1.5	1-Jan-2001
87026W	4.2.5	A1.94	22-Apr-2003
87028CW	5.1.7	A4.35	03-Feb-2010
87040W	4.3.0	A1.97	22-Apr-2004
87041W	4.3.0	A1.97	22-Apr-2004
87051W	4.0.0	A1.5	1-Jan-2001
80752W	4.0.0	A1.5	1-Jan-2001
87053W	4.0.0	A1.5	1-Jan-2001
87054W	4.0.0	A1.5	1-Jan-2001
87055W	4.0.0	A1.5	1-Jan-2001
87057W	4.0.0	A1.5	1-Jan-2001
87058W	4.1.0	A1.7	19-Mar-2002
87063W	4.0.0	A1.5	1-Jan-2001
87064W	4.0.0	A1.5	1-Jan-2001
87065W	4.0.0	A1.5	1-Jan-2001
87066W	4.0.0	A1.5	1-Jan-2001
87068W	4.0.0	A1.5	1-Jan-2001
87069W	4.2.9	A1.96	20-Feb-2004

87082W	4.4.0	A3.07	27-Apr-2006
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