

## Revision information for DCON\_nnn.exe firmware

Model	Interface	SRAM required	CPU speed	Version
I-8410,I-8810 I-8411,I-8811	RS-232/RS-485	256K bytes	40MHz	A5.xx

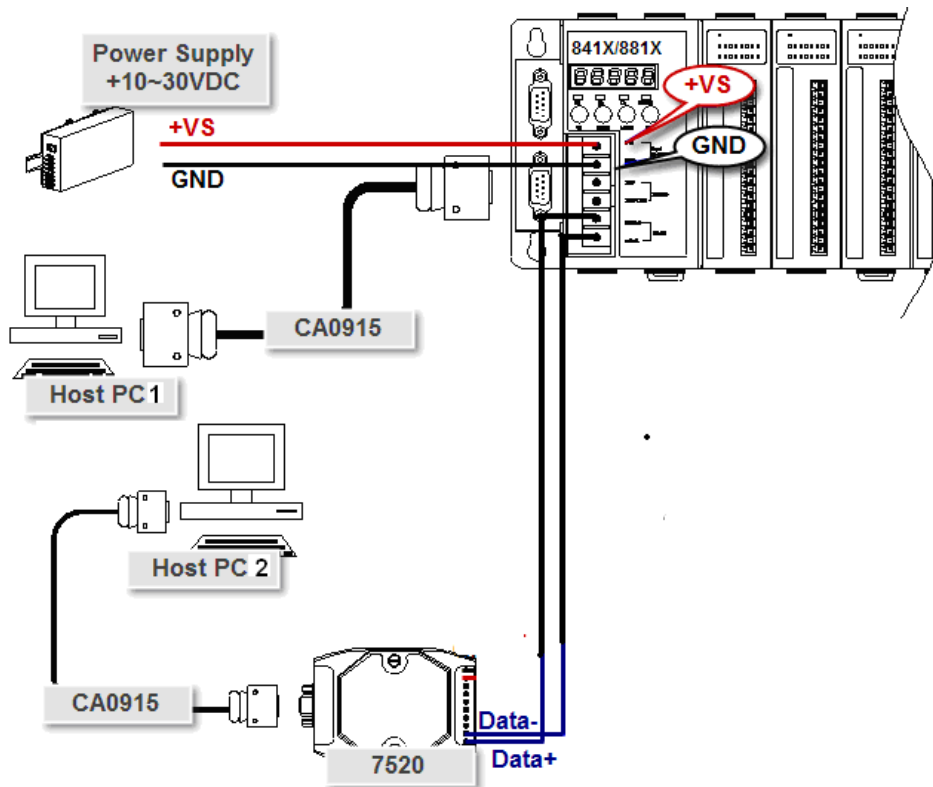
### Last update:

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

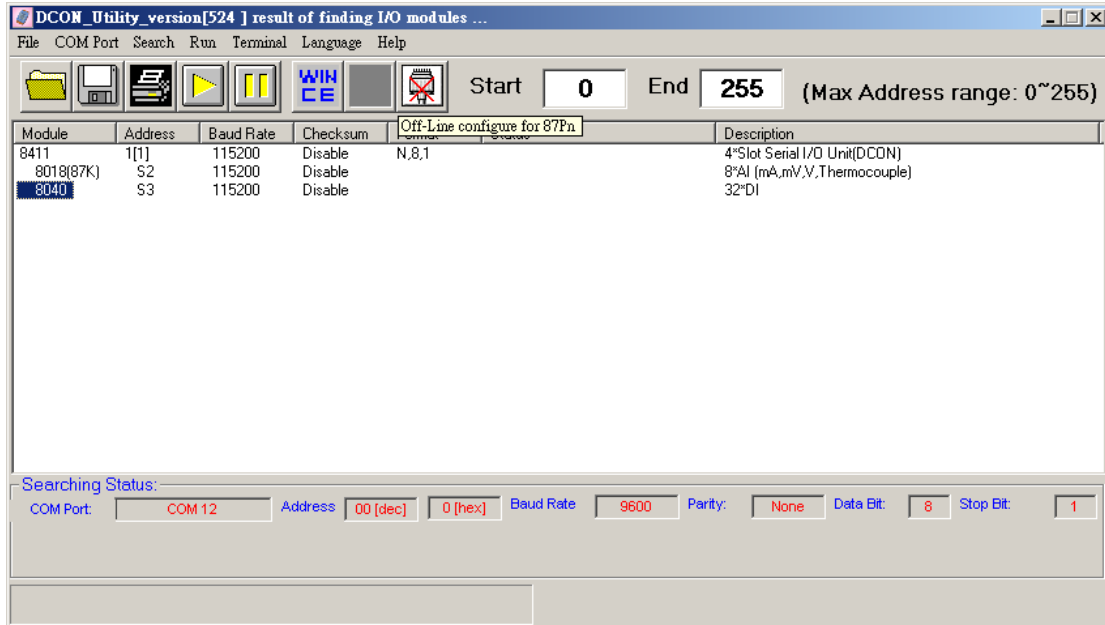
### New support:

In the same time, users can configuration backplane modules via I-8410,I-8810,I-8411,and I-8811 COM1/COM2/COM3/COM4 for single or multi Host PC.

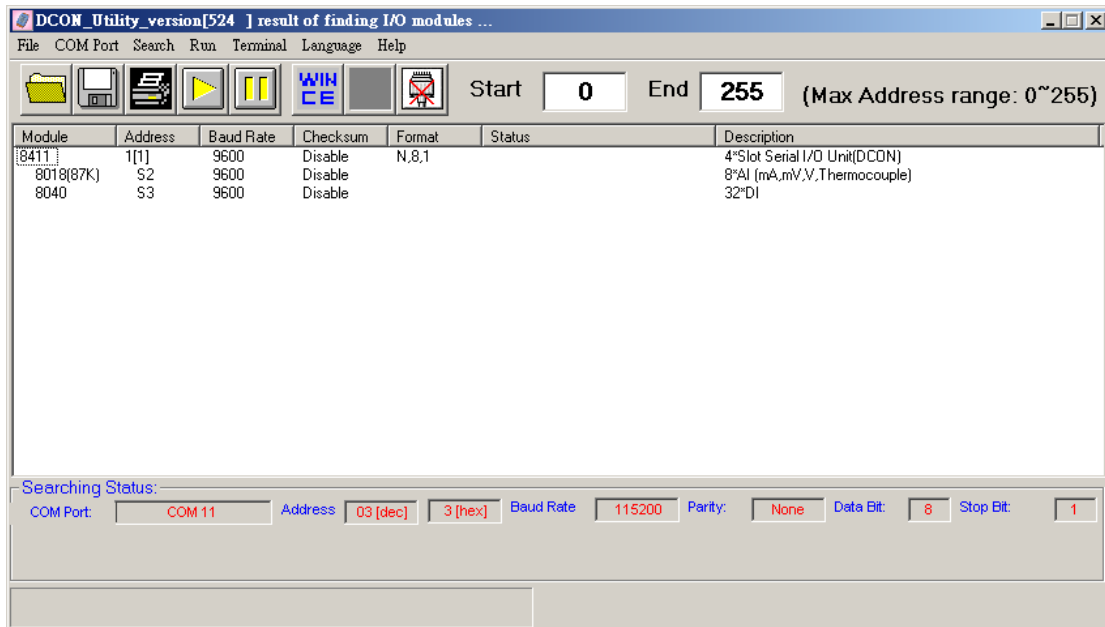
For example: Host PC1 can configure backplane I/O via i-8411 COM1 and Host PC2 also via i-8441 COM2 in the same time.



Host PC1 can configure backplane I/O via i-8411 COM1



Host PC2 also can configure backplane I/O via iP-8411 COM2 in the same time



DCON firmware all versions of iP-8000 COM Ports for configuration backplane I/O module

	COM1	COM2	COM3	COM4	Use all COM in the same time
Version 504 or later	OK	OK	OK	OK	OK
Previous version	OK	OK	NO	NO	NO

**Modifications:**

None

**Bug Fixes:**

Fixed the bug that I-8015 (87k) , I-8018 (87k) and I-8019 (87k) can't set as hex data format

**DCON Utility:**

Must be version 5.2.4 or later

**OS image:**

40 MHz CPU: 8000\_UDP-20091208.IMG or above

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](#)

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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:**

40 MHz CPU: 8000\_UDP-20091208.IMG or above

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:**

40 MHz CPU: 8000\_UDP-20091208.IMG or above

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:**

Must be version 8000-20100223.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

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**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 running 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.

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### **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 ~AADO 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

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

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 ==> !AADDDDDDD ==> 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 ==> !AAUUUDDDDD ==> Read back DO values and  
DI values

(UUUU for DO, DDDD for DI)

@AASi ==> >UUUDDDDD ==> 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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