What is it and what is it for?

It is a technical information to help you to fix all possible problem during the PCINIT (in case of ISA or PCI format card).
REMINDER about the IRQ, MEMORY ADDRESS and CARD NUMBER

ISA CARD

If you have an ISA card: You have to configure three parameters before plugging the card:

- **IRQ**: Configure an available IRQ (IRQ NONE per default, choose IRQ 5 free in most of cases).
- **CARD NUMBER**: The first card has number « 1 » (N°1 per default), the card numbers must be consecutive.
- **MEMORY ADDRESS**: You have to configure an available address (D4000 per default).

See the following array to check what you need to configure (because it depends on your operating system).

<table>
<thead>
<tr>
<th>OS ( &amp; Applicom version needed)</th>
<th>IRQ</th>
<th>CARD number</th>
<th>MEMORY address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Win 2000 (3.4.0 → 3.x.x)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Win NT4.0 (2.9.0 → 3.x.x)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Win NT3.51 (2.6.0 → 2.7.0)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Win98 (2.8.0 → 3.x.x)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Win95 (2.8.0 → 3.x.x)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Win3.x (2.3.0 → 3.1.2)</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DOS (2.1.0 → 3.1.2)</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

PCI CARD

If you have a PCI card: You have to configure one parameter before plug the card:

- **CARD NUMBER**: The first card has number « 1 » (N°1 per default), the card numbers must be consecutive.

See the following array to check if you can use your card in your computer (because it depends on your operating system).

<table>
<thead>
<tr>
<th>OS</th>
<th>CARD Number</th>
<th>applicom Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Win 2000</td>
<td>✓</td>
<td>3.4.0 → 3.x.x</td>
</tr>
<tr>
<td>Win NT4.0</td>
<td>✓</td>
<td>3.0.0 → 3.x.x</td>
</tr>
<tr>
<td>Win NT3.51</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Win98</td>
<td>✓</td>
<td>3.0.0 → 3.x.x</td>
</tr>
<tr>
<td>Win95</td>
<td>✓</td>
<td>3.0.0 → 3.x.x</td>
</tr>
<tr>
<td>Win3.x</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>DOS</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

applicom international SA – - June 2001 - By Frédérick LOCQUEVILLE  Page 2/22
WHAT IS APPDEBUG?

It’s an applicom tool to “read” the ram content in order to check if the card is working correctly. You will use this software to fix your PcInit trouble.

REMEMBER what is APPDEBUG and what can i check?

Path to find APPDEBUG.EXE file: \c:\program file\applicom\applicom3.x\APPDEBUG.EXE

You can see all card found into the computer

You can see if some card are present into the computer without configuration in PCCONF

You can see the contents of the DPRAM if you push on this button

When all works fine, you must see the pattern of the card (00 55 aa ff)

In all case, you must see two counter (values are changes).
How to use this technote?

- Pcinit give a feedback error.
  You need informations to fix the trouble….

- Check the « cases » from page 5 to 9 and find a similar message…

- Read the explanation. Go to the annex in relation to find more informations (hyper text connection).
CASE N°1.

PCI

➤ PCI card configured but any card found (see annex 2)
➤ PCI card configured and ISA card present but not configured in PCCONF (see annex 1)
➤ PCI card configured but the card present in the PC write some incoherent characters into the DPRAM (see annex 10)

ISA

➤ Card not present (see annex 4)
➤ Memory address not equal between pconfig and the card (see annex 3)

CASE N°2.

PCI

➤ You have defined a PCI card, and you have installed a PCI card into the PC with a bad card number (see annex 7)

ISA

➤ You have defined a ISA card, and you have installed a PCI card into the PC (see annex 5)
➤ You have defined several ISA card, and you have installed just one ISA card into the PC (see annex 8)
CASE N°3.

**applicom initialization**

- Close this dialog box at the end of the execution
- Action(s)'s details
- Initialization processing
  - Loading on board 1: DATA_BAS
  - Sequence of tasks loading
  - Starting tasks loading on board 1
  - Loading on board 1: DATA_BAS
  - ERROR - ALOAD - Board < 1 > task < data_bas > status = 51
  - probably IRQ conflict

Card n°1 PCI1500PF8 prom V3.7 Serial number 1677215

PCI

⇒ You have a shared IRQ between the applicom card and another device, but the shared function is not realised correctly (try to find with your operating system the conflict)

ISA

⇒ You have defined a ISA card, and you have installed a ISA with another IRQ number (see annex 6)

CASE N°4.

**applicom initialization**

- Close this dialog box at the end of the execution
- Action(s)'s details
- Initialization processing
  - Initialization process running
  - open industrial communication concept!
  - Started the: 06/08/2001 at: 18:34:30
  - applicom® 3.4
  - Options:
    - ATEST Q $00001
    - Card 1 not installed or configuration error. Verify your configuration.

Error

PCI & ISA

⇒ You have modify your applicom configuration, but you do not have reboot your computer.

**SOLUTION:**

Reboot your computer in order to re-initialise your applicom driver.
CASE N°5.

PCI & ISA

It is a major error.
You have defined a ISA or PCI card.

SOLUTION :

Call directly the techsupport
(see an exemple about this error :  annex 9 )
CASE N°6.

**PCI & ISA**
It is a major error (internal checked problem)

**SOLUTION:**
Call the techsupport.

---

CASE N°7.

**PCI & ISA**
It is a minor error. You have define a protocol into PCCONF, but you have forgeted to check the radio button regarding this protocol during the applicom installation.

**SOLUTION:**
Re-install the applicom installation software (from the CDROM) and choose the «Modify» action in order to add your protocol (see annex11).
CASE N°8.

It is a minor error. You have define a command line into the APPUSR.INI file in order to launch a software when the PCINIT is finish, but your command line is wrong.

SOLUTION:
Modify your command line with the good path (see annex12).

CASE N°9.

It is a minor error.

You try to start an applicom card sold for non Windows OS (you need a software key to use an applicom card under Windows OS).

SOLUTION:
Call your applicom reseller to buy a key for Windows (see annex13).
An ISA card without configuration in PCCONF is detected into your computer.

Select the radio button to see the memory contents.
Annex2

Possibility:
Card not present (check the card location).
You have forgotten to disable the PnP OS option flag (computer BIOS).
You have forgotten to disable the RESET CONFIGURATION DATA option flag (computer BIOS).
You have forgotten to disable the PCI CLASS CODE FFh option flag (computer BIOS).
Card out of order (call techsupport).
You have configured D4000 for the memory address into PCCONF.

No card Pattern.

You have configured D6000 for the memory address on the card:

Modify your memory address into PCCONF or into the card.
Possibility: Card not present (check the card location).
You have forgotten to reserve the IRQ and/or the memory address into the computer BIOS.
Card out of order (call techsupport).
One card is detected without configuration in PCCONF

<table>
<thead>
<tr>
<th>Board 1</th>
<th>ISA A9-0x6000-4000</th>
<th>Card not found - Serial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offset in RAM10:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0x000</td>
<td>0x400</td>
<td></td>
</tr>
<tr>
<td>0x190</td>
<td>0x220</td>
<td></td>
</tr>
<tr>
<td>0x000-0x2FF</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Driver failure

Memory and IRQ problems

No card Pattern

A PCI card is PRESENT
The card is present.

You have defined two different IRQ between the hardware and PcConf.

Check the IRQ configuration.
One card is detected without configuration in PCCONF

No card Pattern

Driver failure

Memory and IRQ problems

The card number is « 2 »:
Change the card number

card Pattern (the card is OK)
TechNote 4
Problems after Pcininit

Annex 8

Driver problem
Card not found into the computer
Card Pattern (this card is OK)
### Annex 9

**TechNote 4**

**Problems after Pcinit**

---

#### The memory address and the IRQ are OK

- The card pattern is not present.
- Defective card.

---

#### APPDEBUG

<table>
<thead>
<tr>
<th>Board 1</th>
<th>FCL AD-0xa00000 FCF-09 OK - SerialNumber - 167</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board 2</td>
<td></td>
</tr>
<tr>
<td>Board 3</td>
<td></td>
</tr>
<tr>
<td>Board 4</td>
<td></td>
</tr>
<tr>
<td>Board 5</td>
<td></td>
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<tr>
<td>Board 6</td>
<td></td>
</tr>
<tr>
<td>Board 7</td>
<td></td>
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<tr>
<td>Board 8</td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Address</th>
<th>Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>FF</td>
</tr>
<tr>
<td>0010</td>
<td>FF</td>
</tr>
<tr>
<td>0020</td>
<td>FF</td>
</tr>
<tr>
<td>0030</td>
<td>FF</td>
</tr>
<tr>
<td>0040</td>
<td>FF</td>
</tr>
<tr>
<td>0050</td>
<td>FF</td>
</tr>
<tr>
<td>0060</td>
<td>FF</td>
</tr>
<tr>
<td>0070</td>
<td>FF</td>
</tr>
<tr>
<td>0080</td>
<td>FF</td>
</tr>
</tbody>
</table>

---

**Refresh**  **Read Ram10**  **Exit**
Problems after Pcinit

One card is detected without configuration in PCONF

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<table>
<thead>
<tr>
<th>Card</th>
<th>VRAM</th>
<th>VIB</th>
<th>VRB</th>
<th>VRM</th>
<th>VRB</th>
<th>VRM</th>
<th>VRB</th>
<th>VRM</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
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<td>0080</td>
<td>0080</td>
<td>0080</td>
<td>0080</td>
</tr>
</tbody>
</table>

---

Driver failure
Memory and IRQ problems
No card Pattern
Select the radio button to see the memory contents
Incoherent RAM, call the techsupport
Select « Modify » in order to add your protocol

Select the needed protocol
Annex 12

Path to find the appusr.ini file: `c:\program files\applicom\applicom 3.x\config\appusr.ini`

**BAD**

![BAD Notepad screenshot]

**GOOD**

![GOOD Notepad screenshot]
Annex13

Path to find PCKEY.EXE file: `c:\program file\applicom\applicom 3.x\pckey.exe`

<table>
<thead>
<tr>
<th>Card 1:</th>
<th>Card 2:</th>
<th>Card 3:</th>
<th>Card 4:</th>
<th>Card 5:</th>
<th>Card 6:</th>
<th>Card 7:</th>
<th>Card 8:</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC1500FFB</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>16777215</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4.0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CA0105</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When you have receive a code, write it here and push the button « Update key »