Barrys Visual Model 8192-System-Bus-design

By

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Introduction

Today is 09/08/2016, I would like to thank you for taking the time in reading this scientific work. I originally published this work in July of 2013 but reviewed this work and I felt it needed some enhancements and or improvements. I am attempting to create a New System Bus and MAC address concept based on PC Architecture by creating a new interface with my Motherboard -Designs. The problems I have encountered are the following:

1). 8 Bit ASCII Code terminals using Linux based software.
2). File and object Right Permissions being administered remotely.
3). Ca's Certificate of Authorities built in being manipulated.
4). Wifi and Rogue Public Servers.

This has created a serious Hardware and Architecture problem that requires a complex solution.
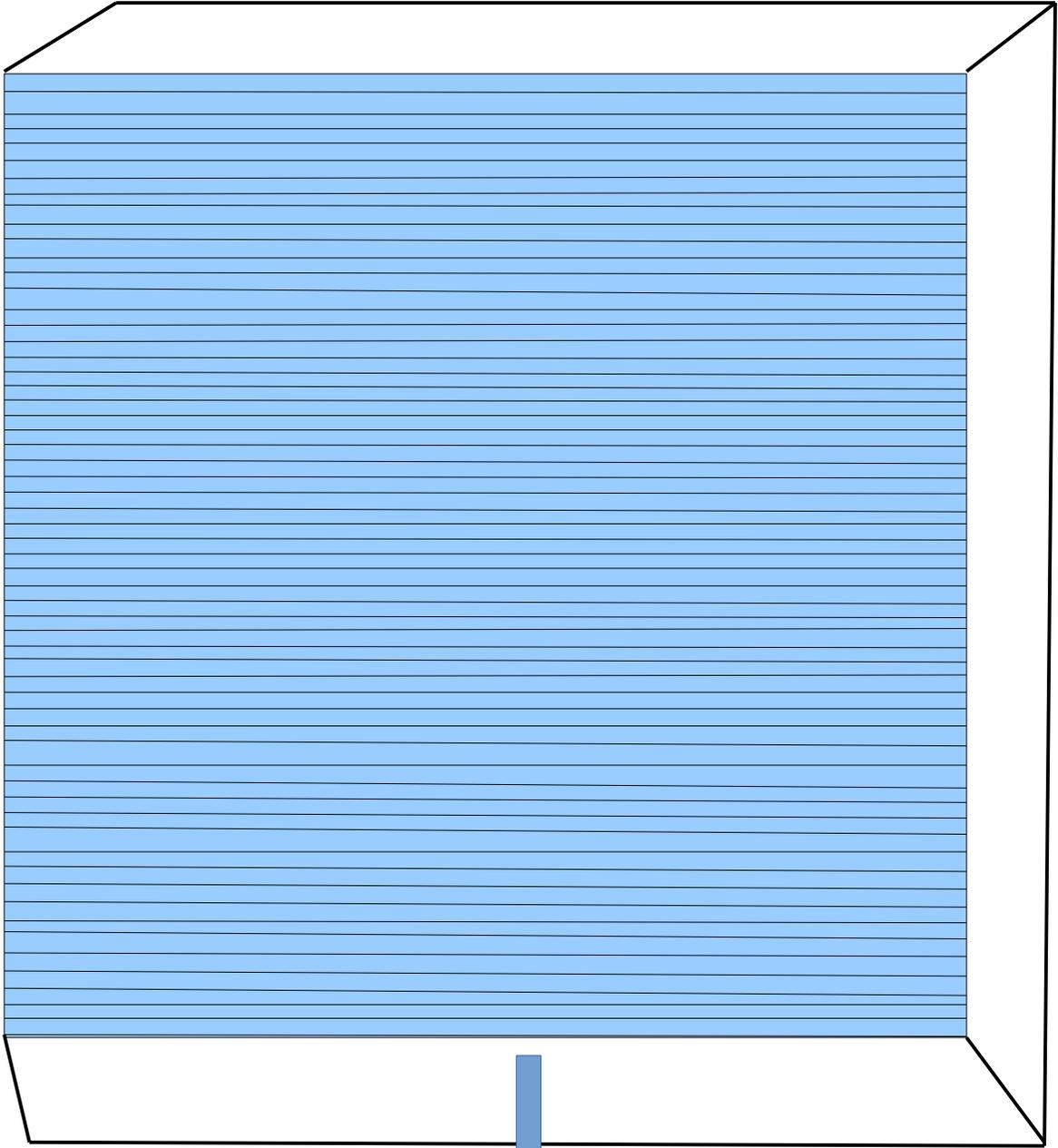
The Theory's I have written in my previous copyrights needed a answer as to how can a theory be made useful in everyday lives. Complex Theory, Design, and development is much like a ladder it takes gradual steps to arrive at a solution. I hope that if you have read my previous works you will see this. I have broken this paper into 3 Chapters the 1st chapter shows the design along with parameters. The 2nd Chapter shows some basic pseudo code and the final chapter gives a final thought.

The New Design feature's include the following improvements:
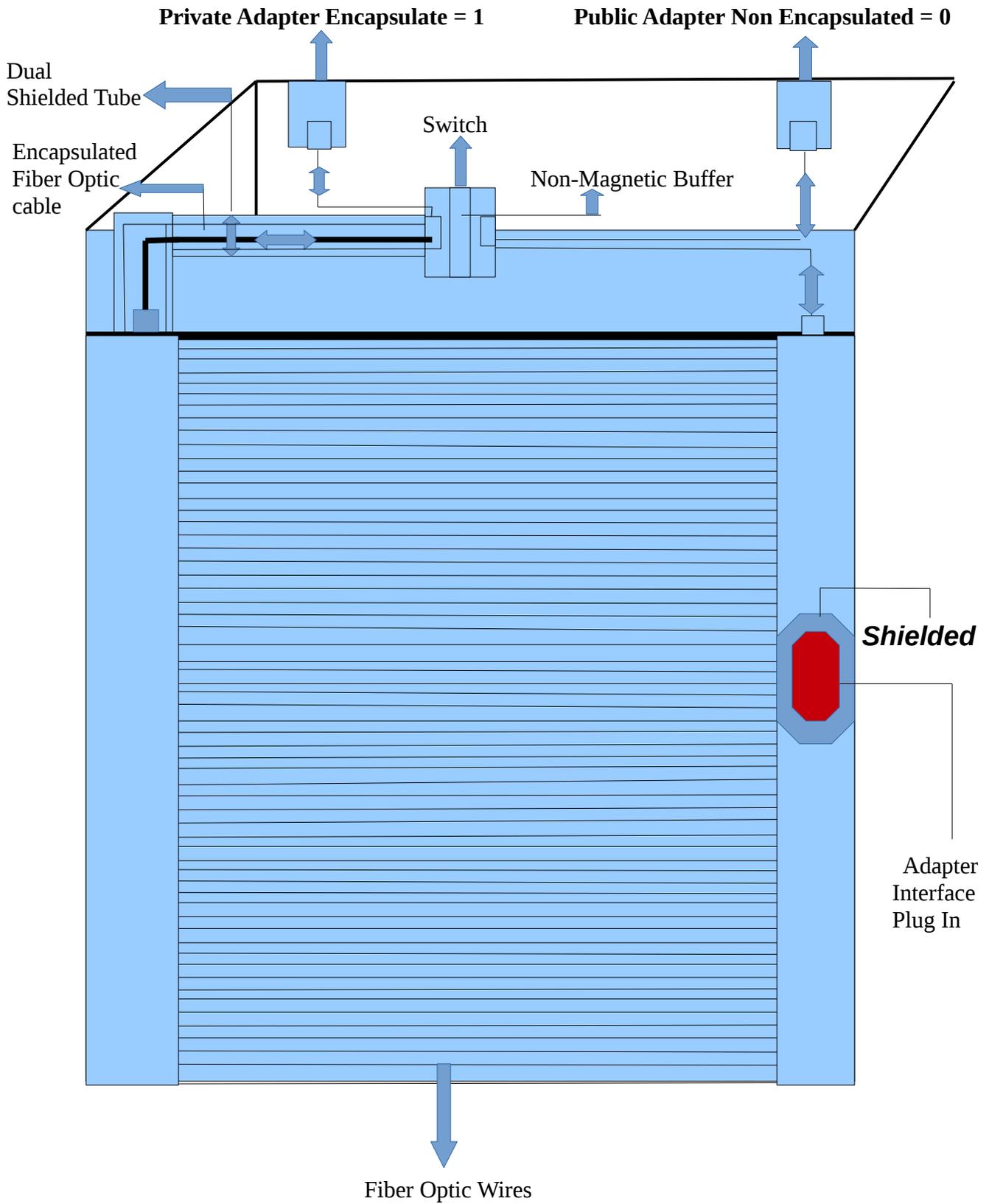
Hardware

1). 64 bus Fiber optic wire
2). Private and Public Adapter switch
3). Encrypted MAC address Physical Security

Chart1-A 64 Wires for Bus

System Bus Fiber Optic Wire
Chart 2-A 64 Wired Bus

Private Adapter Encapsulate = 1   **Public Adapter Non Encapsulated = 0**

Dual
Shielded Tube

Switch

Encapsulated
Fiber Optic
cable

Non-Magnetic Buffer

Shielded

Adapter
Interface
Plug In

Fiber Optic Wires

Features of New Design and Concept

I would now like to bring your attention to the new features regarding the System-Bus and Mac Address. Please note I have used 64 fiber wires producing 2 bits per wire total 128 bits with 64 bytes and 32 characters for the mac address field. Please note the Private adapter from the bus has a switch of 1 or on meaning it is encapsulated and shielded also, inside is fiber optic cable usually Fiber optic cable is protected by glass which takes heat up to 2300 degrees Fahrenheit. The switch to the Public and Private have a Non-Magnetic metal buffer between Public and Private to insure data integrity. The total bit strength is 8192 bits. The Public Adapter has a switch of 0 and data is not protected or encapsulated but is authenticated using RSA keys to present credentials. This leaves choices for the End-User to either secure their data or elect not too examples are Social networks possibly faster throughput this is a case not to secure the data while if you are conducting business transactions you would want to secure the data. Please see field parameters on the next page.

The 8192 Bus has a shielded Adapter Interface plug in to protect from unauthorized software power settings hint rogue wireless roaming signals from questionable routers.

After looking at many motherboards over the past 20 years, I would question the board's design concept by infusing the wires into the board itself. As you may or may not know MAC addresses are non-routable but they advertise their addresses much like a broadcast which non-wireless networks could possibly create problems because IP addresses can be binded to MAC addresses. I feel a better method would be to encapsulate the data shielding it from this type of activity than binding the mac address and routing it also more curvature based formats along with hardware could be combined.

Chart 3-A Linear based Field Parameters

1	2	3	4	5	6	7	8

8 Fields 4 Characters
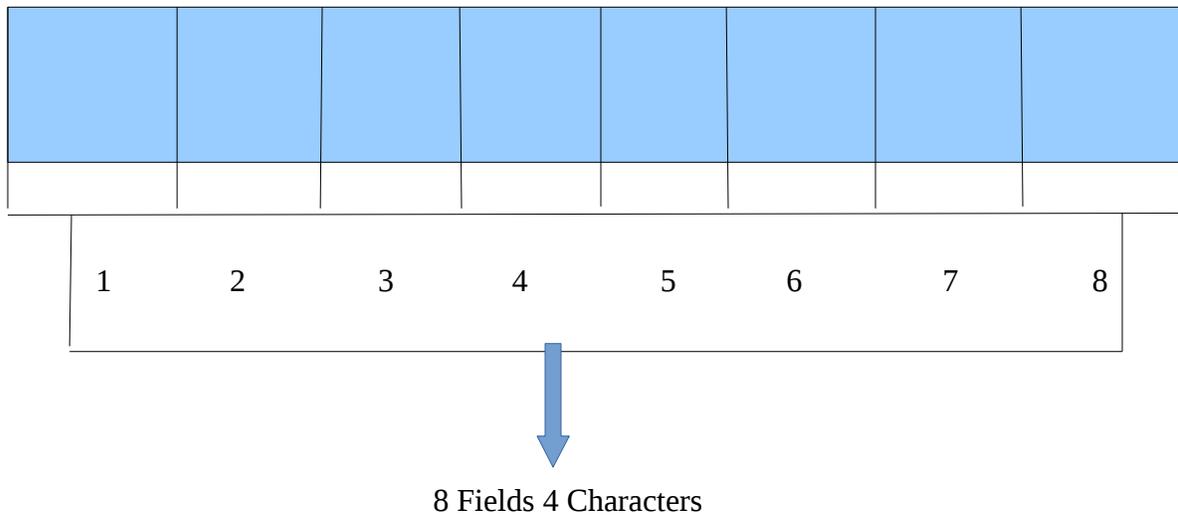
Mac Address field parameters

1bcd fghj kmne rthg okmn qafv jnbv jkge

0bcd fghj kmne rthg okmn qafv jnbv jkge

Field Parameters

        Please find the Mac address field starting with 1 or 0 than the next is 31 characters creating a total of 32 characters. Please find below the Chart below

Network   - 192.168.1.1 Private address binded to mac address
                  x.x.x.x   Public address non binded mac address

Mac Address – bytes to frames   64 bytes to 32 Characters

Physical address bits to bytes   128 bits 64 bytes

Sub-Physical   volts to bits   6 volts - 8192 Bits

        Please note the Private adapter is encapsulated and shields the mac address thereby using a physical method of making data non-visible or encrypted. The Private address is binded to the MAC address with IP packets tunneled when using the Internet. The Normal MAC address usually has 12 characters with 2 characters for a total of 6 fields. I have basically expanded this by using 4 characters per field for a total of 8 fields total characters 32. Please note because I am producing 6 volts the following conditions apply either share the battery resources dual battery or using a better metal that can tolerate heat better such as titanium.

Please also note because the MAC address requires 4 character fields 32 MAC addresses 8 bit codes would not work in this model also because the MAC address using the private adapter can be binded to the Private IP address IP packets would not be able to be redirected or administered remotely or data corruption and integrity would occur this by default would not permit file, object, or certificates to be manipulated without incurring data corruption ;however, The Public adapter can be used for redirects if this is desired but promotes Authentication providing some level of IT Security with faster throughput. I would now like to present the next chapter.

Chapter 2

Pseudo-Code for 64 Wired Bus

I would now like to present some pseudo code which is not correct syntax for programming but provides some basic logic and flow on how this maybe achieved

Pseudo Code for Processing Address Spaces

1   =   Private-Adapter

0   =   Public-Adapter

Default   =   Public-Adapter Default

If A   = 1

then

Goto Private-Adapter processing

Else

If B   = 0

then

Goto Public-Adapter processing

Else

Goto Public-Adapter

end

A   **Private Adapter Processing – Internal Mac Encapsulation**

              a = 0

field-1	=4
field-2	=4
field-3	=4
field-4	=4
field-5	=4
field-6	=4
field-7	=4
field-8	=4

- data linear format
  set array-1 to 8192 bits
  divide 8192 bits by 128 bits
- Compute 64 bytes
  divide 64 bytes by 2
  set array-1 to 32 characters
  define characters per field 4

move a + 4	field-1 =	field1-a
move	field1-a + 4 =	field2-b
move	field2-b + 4 =	field3-c
move	field3-c + 4 =	field4-d
move	field4-d + 4 =	field5-e
move	field5-e + 4 =	field6-f
move	field6-f + 4 =	field7-g
move	field7-g + 4 =	field8-h

move array-1 {field1-a,field2-b,field3-c,field4-d,field5-e,field6-f,field7-g,field8-h
encapsulate array-1 to Internal-IP-address
bind array-1 private-reserved-IP-address
Tunnel public-address-space
clear array-1
goto end

B   **Public-Adapter Processing – Internal Mac Encapsulation**

```
a = 0
auth-1       =1
auth-2       =2
auth-3       = 3
field-1      =4
field-2      =4
field-3      =4
field-4      =4
field-5      =4
field-6      =4
field-7      =4
field-8      =4
RSA-key      =8192
```

- data linear format
  set array-1 to 8192 bits
  divide 8192 bits by 128 bits
- Compute 64 bytes
  divide 64 bytes by 2
  set array-1 to 32 characters
  define characters per field 4

```
move a + 4    field-1 =            field1-a
move          field1-a + 4 =       field2-b
move          field2-b + 4 =       field3-c
move          field3-c + 4 =       field4-d
move          field4-d + 4 =       field5-e
move          field5-e + 4 =       field6-f
move          field6-f + 4 =       field7-g
move          field7-g + 4 =       field8-h
```

move array-1 {field1-a,field2-b,field3-c,field4-d,field5-e,field6-f,field7-g,field8-h
bind array-1 public address
Rem Key is attached to IP address to present credentials to Public based Servers

- **
- *
- *   **Authentication Menu Choice**
- *
- *   1   8192 RSA 1 key no encryption
- *
- *   2   8192 RSA 4096 Key 1 subkey encryption
- *
- *   3   8192 RSA   2048 Key 3 subkeys encryption

```
if auth-1 = "1"
set  RSA-key = 8192
else
if auth-2 = "2"
set 4096 RSA-key = 4096
set RSA-subkey-1 = 4096
encrypt 4096 RSA-subkey-1
else
if auth-3 = "3"
set 2048 RSA-key = 2048
set 2048 RSA-subkey-2 = 2048
set 2048 RSA-subkey-3 = 2048
set 2048 RSA-subkey-4 = 2048
Rem define and set variable for RSA-key
Rem define and set variables for RSA-subkeys
encrypt 2048 RSA-subkey-2
encrypt 2048 RSA-subkey-3
encrypt 2048 RSA-subkey-4
rem encryption is a application level 7th layer on OSI stack
else
set 8192 RSA-key
bind "Authentication Menu Choice" to mac address
bind mac address to Public-IPaddress
send Public-IPaddress to Internet
clear array-1
goto end

end
```

I would now like to provide a brief overview of the pseudo-code that has been provided. The logic asks is the switch in the 1 or 0 position depending on the answer it goes to the Private or Public Adapter modules for processing. If neither is chosen the default is Public-Adapter.

The Private and Public Adapter Modules than set the fields in the form of a array and than within the array fields are defined bits, bytes, mac addresses. After the fields have been set and moved, The private-adapter encapsulates the data via fiber optic. The public Adapter does not encapsulate and has no fiber optic cable but it Authenticates.

The next step is the Private-Adapter binds the Mac address to a private-reserved IP address and than a tunnel or a shell please note software programming allows tunnels to be tunneled creating a dual tunnel effect and can be programmed from private to public a dual shell within the

 Public space. The Public-Adapter does not encapsulate but binds the MAC Address along with the RSA key so in essence this can be redirected if needed also remotely administered information is verified at the End-User point as prescribed by TCP/IP acknowledgment.

I will now provide my final thoughts in the next chapter

Chapter 3

Final Thoughts

I feel that better methods of data delivery on a lower level in networking technology should be investigated to prevent harmful actions by those that misuse it. After completing numerous Motherboard designs, I felt their was a need to innovate lower level interfaces because basically Networking technology on a intimate level has not kept up with the Applications development thus creating a mismatch between Application and System level technology so by creating a new interface between Motherboard and System buses this bridges the gap humor North and South Bridge on a Motherboard. I have mostly discussed about linear based types of motion hardware and software but a combination of linear and curvature maybe incorporated within the foreseeable future.

The improvements I have made from the last work published July 2013 is the implementation of Authentication of the Public Adapter allowing for the presentation of Credentials also allowing the End User to decide which security method for Authentication suits their preferences.

Thank you for reading this work and I hope somebody got something out of this.

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