

Thanks for you selecting Beyondinfinite.com products.  
Before using the Digital Signage board, please read this manual thoroughly, and retain it for future reference.  
It will help you to use the A/D board easily.

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# 1. PRODUCT OVERVIEW

## 1.1 Product Definition

BIDSP is networked HD quality real-time digital signage player. It can play high quality advertising photo and movie on internal storage, PC on the network or internet server.

BIDSP can used on market, school, hospital, restaurant and office to introduce there product and services with high quality photo or movie.



Board-Level Product

## 1.2 Main Components

The Beyondinfinite BIDSP board level product include following components.

Please refer hardware specification

Wireless-LAN card, antenna is on BIDSP-035WP only

Power Adapter

DC 12V, 3A or over

Remote controller

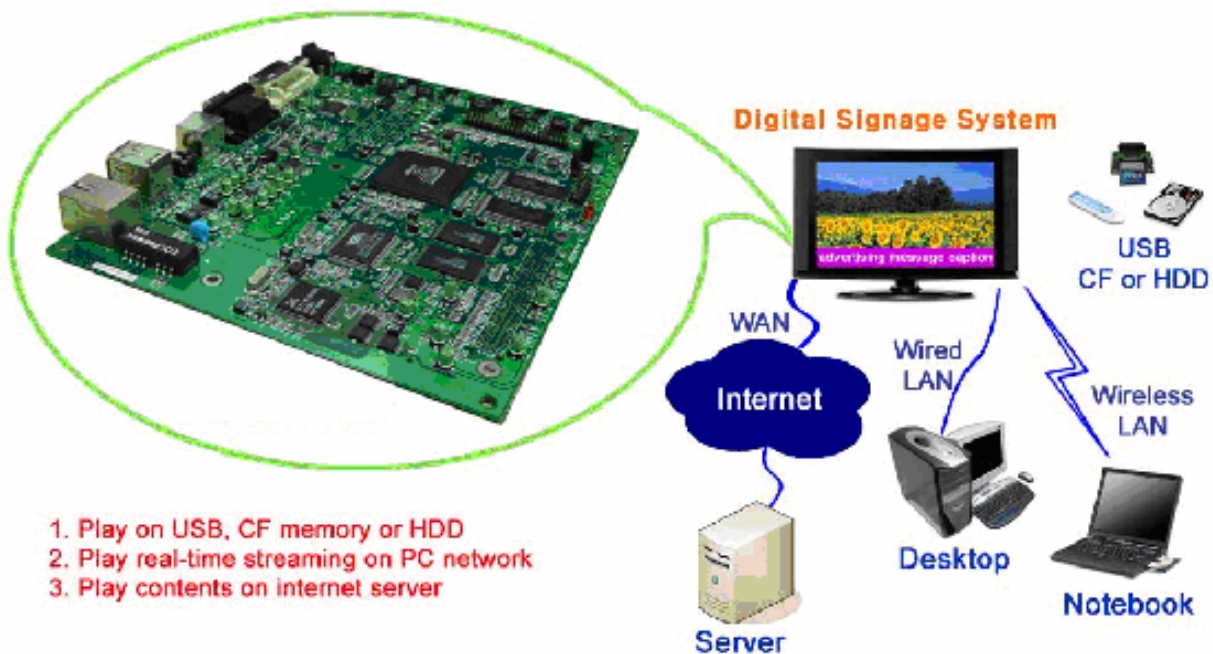
Hot-key for auto start play

Hot-key for video, photo, audio and setup

## 1.3 Product Operations

### 1.3.1 System Organization

BIDSP board level product is built in inside of digital signage system. Digital Signage system can be one of display built-in product or stand-alone product.



### 1.3.2 Operation Diagram

Advertiser can operate BIDSP advertising contents with one of following operation diagram.

#### 1) Stand-alone display



Play the advertising contents on internal or external storage such as USB memory, CF memory card or HDD without network connection.

This type of operation is best fits for small office, restaurant, market, hospital and so on.

#### Application

Small office, restaurant, market, hospital,

#### Advertising Contents

Using internal storage or external memory card USB memory, CF memory card or HDD.

#### 2) Real-time streaming with local server PC



Play the advertising contents on server PC that connected with LAN. This type of operation don't need any memory cards for store contents.

This type of operation is best fits for medium sized office, restaurant, market, hospital, museum and so on.

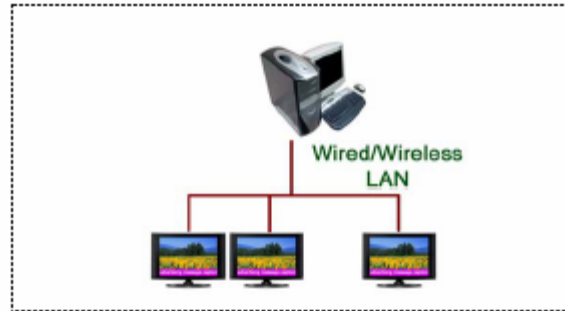
#### Application

Small sized office, restaurant, market, hospital, museum, Medium sized office, restaurant, market, hospital, museum,

#### Advertising Contents

Advertising contents are stored at one of PC on the local area or on wide network area. It don't need any memory card with this type of operation

## Operation Diagram



### 3) Wide area advertising with internet server

Advertising contents are stored at contents server on the Internet and the contents are copied to internal storage prior to play.

This type of operation is best fits for chained office, restaurant, market, hospital, museum and so on. Advertiser can control NETCION-DSP with simple command too.

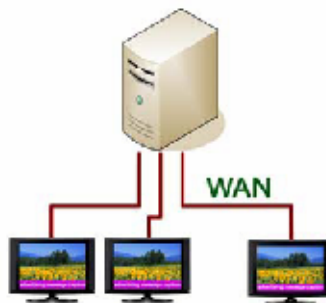
#### Application

Medium sized office, restaurant, market, hospital, museum, Chained office, restaurant, market, hospital, museum.

#### Advertising Contents

Advertising contents are stored at contents server on the internet and the contents are copied to internal storage prior to play.

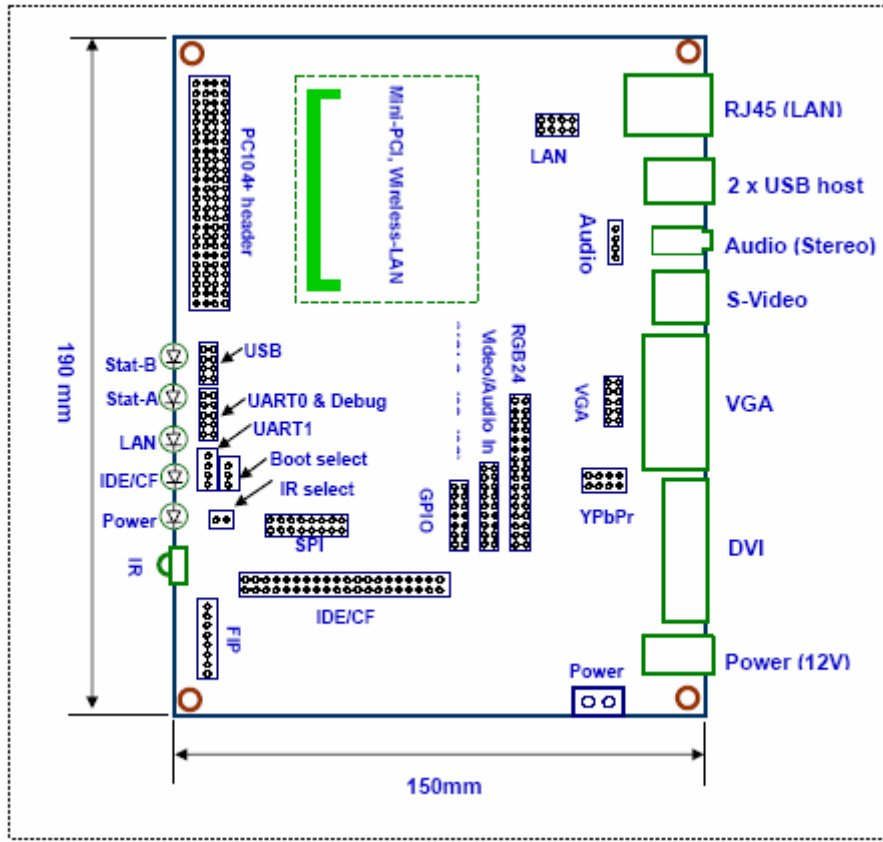
### Operation diagram



## 2. PRODUCT SPECIFICATION

### 2.1 Hardware Specification

#### 2.1.1 Board Organization



**BIDSP BOARD**

## 2.1.2 Board Specification

COMPONENTS	DESC RIPTION	
CPU	EM8621L	
MEMORY	NOR FLASH 16MB	
	SDRAM 64MB	
STORAGE	USB memory	USB 2.0 host
	CF card	Using CF-IDE Adapter
	2.5 inch HDD	Notebook HDD
VIDEO Output	Output Port	DVI, VGA(D-Sub), S-Video
	Resolution	1,024x768, 1,280x1,024, 1,366x768
AUDIO Output	Stereo Jack	
USB 2.0 HOST	External Storage	
Networking	10/100Mbps Wired LAN	
	802.11 b/g Wireless LAN, Using Mini-PCI interface	
	PC104 interface for 3G	
IR receiver	IR remote controller receiver	
Status LED	Power, LAN Link/Act, CF, 2 Status LED	
Header	24bits RGB out	For expand LVDS interface
	IR / LED Header	Front Panel Interface
	Audio R/L	Connected to internal speaker
	VGA	Used in display built-in product
	8-BIT YCBCR	Video input port
	I2S / SPDIF	Audio input port
	I2C	Video/Audio input control
	Ethernet	Future use
	USB 1 / USB 2	Future use
	UART 1 / UART 2	Future use, For control
	SPI Header	Future use
Power	DC 12V/2A,	
Operating Current	Standby 0.33A@12V, Working 0.38A@12V	
Board Size	190x150 mm	

## 2.2 Software Specification

### 2.2.1 Advertising Specification

Auto start play advertise contents after power-up

Advertiser can select auto start format

Play all, play video, play photo, play photo with background music.

Slide effect for advertising effect

Cross fade, random and more slide effect support

Support background music

Advertising description message

Change the message easily by edit text file

Change the location one of top or bottom side.

Change text color and background color

On/off advertising message

Keeping advertising contents

External storage: USB, CF card

Internal storage: HDD (Optional)

PC or storage server on network

- Microsoft folder share

- Advertiser can use one of PC on the office or hall

Auto startup/shutdown with real-time clock (RTC)

Advertiser can set current time, startup/shutdown time

System startup/shutdown automatically at configured time

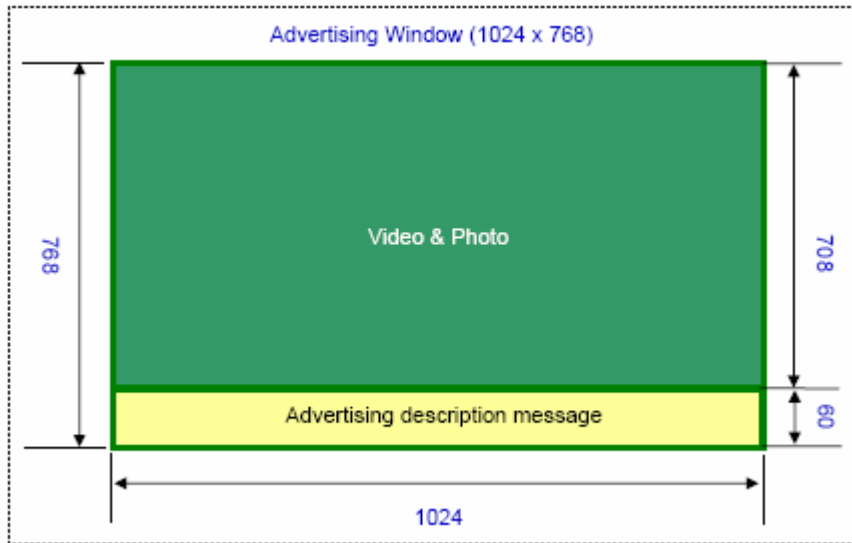
Control OSD message

Enable/disable OSD message

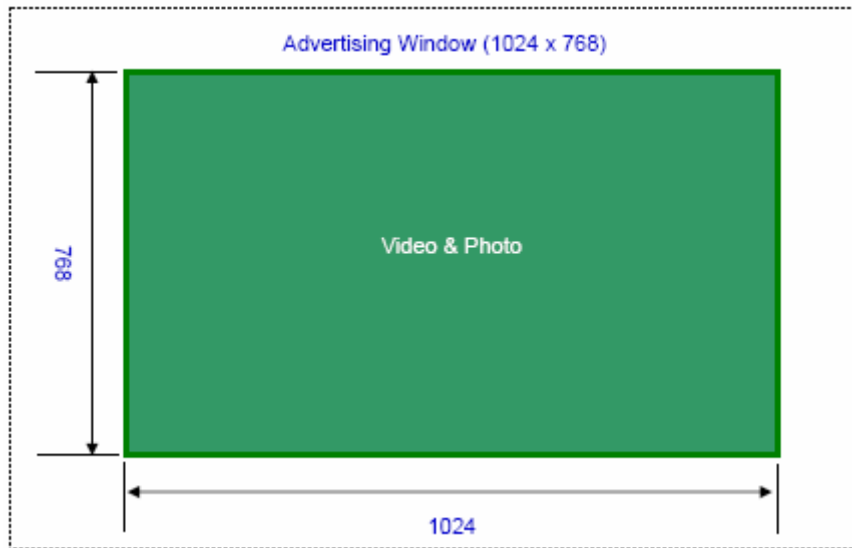
File sorting

Advertiser can sort file as name, data or size of contents

**Advertising display**  
**Advertising with message**



**Advertising without message**



## 2.2.2 Video & Audio Specification

Support video format

MPEG2

- 1920x1080i30, 1920x1080p30, 1280x720p60, 720x576p or less

MPEG4

- AVI, Xvid, DivX 3.11/4.x, 5.x

- 1280x720p30, 720x576p or less

WMV9

- 1280x720p30, 720x576p or less

- 1440x816p24(2.35:1 anamorphic movie)

- 1440x1040p24 (1.85:1 anamorphic movies)

Support photo format

JPEG, BMP, PNG, GIF

Support audio format

WMA, MP3, WAV, AAC, AC3, PCM

## 2.2.3 Storage & Networking Specification

Wired Network

10/100Mbps LAN

Static & Dynamic IP support

Wireless Network

802.11b/g wireless LAN

Static & Dynamic IP support

Network server connection on local private network

Microsoft file and folder share

Advertiser must specify IP address, security and folder

Network server connection on Internet

Get contents from server via HTTP/GET protocol

Storage

External storage

- USB memory card

- CF card, need CF socket adapter

Internal storage

- 2.5 inch HDD (Optional)