

# Thinvent Digital Signage System Specifications

The configuration of the digital signage computer depends on the specific use case of each project. The following two are our standard products that meet most common needs. We can also perform an on-site evaluation of the customer needs, and provide customised computers as per the requirements identified.

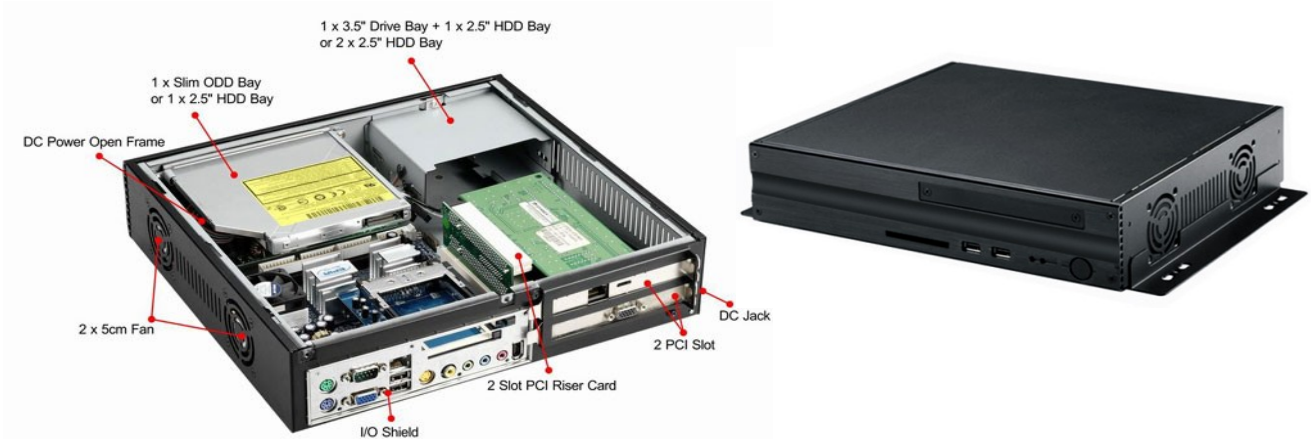


Illustration 1: DS 400 inside and outside view<sup>1</sup>



Illustration 2: DS 300 system overview and outside view<sup>1</sup>

<sup>1</sup> Please note that the fans shown in these illustrations are optional

## Hardware Specification

| Model →                | DS300  | DS400  |
|------------------------|--|--|
| <b>Power Supply</b>    | 12 V DC, 100W open frame   | 12 V DC, 100W open frame   |
| <b>Power Adaptor</b>   | 60 to 120W AC (optional)   | 60 to 120W AC (optional)   |
| <b>Dimensions</b>      | 210 × 257 × 65mm (D×W×H)   | 273 × 300 × 65mm (D×W×H)   |
| <b>Colour</b>          | Black  | Black  |
| <b>CPU</b>             | Intel Atom 1.6GHz Fanless<br>N230 single core / N330 dual core<br>x86-64, HT enabled | Intel Atom 1.6GHz Fanless<br>N230 single core / N330 dual core<br>x86-64, HT enabled |
| <b>Chipset</b>         | Intel 945GC + ICH7<br>533 MHz FSB  | Intel 945GC + ICH7<br>533 MHz FSB  |
| <b>Graphics</b>        | Integrated 950GMA graphics core  | Integrated 950GMA graphics core  |
| <b>RAM</b>             | DDR II × 2 DIMM, maximum 2 GB  | DDR II × 2 DIMM, maximum 2 GB  |
| <b>Flash Drive</b>     | 1/2/4 GB compact flash   | 1/2/4 GB compact flash   |
| <b>HDD</b>             | 40/80/160 GB SATA 2.5"   | Upto 1 TB SATA 3.5"<br>40/80/160 GB SATA 2.5"  |
| <b>ODD</b>             | Slim ODD – DVD/CDRW or DVD writer  | Slim ODD – DVD/CDRW or DVD writer  |
| <b>PCI slot</b>        | PCI unusable   | 2 × PCI  |
| <b>Serial/Parallel</b> | 1 × 9-pin COM, 1 × Centronics parallel   | 1 × 9-pin COM, 1 × Centronics parallel   |
| <b>USB</b>             | 2 front + 4 rear + 2 internal  | 2 front + 4 rear + 2 internal  |
| <b>Sound</b>           | AC97 5.1 Channel   | AC97 5.1 Channel   |
| <b>NIC</b>             | Onboard 10/100 Mbps  | Onboard 10/100 Mbps  |



## Hardware Details

### Intel® 945GC Chipset

- 1066/800/533 MHz System Bus
- PCI Express Interface
- Intel® Graphics Media Accelerator 950
- Intel® High Definition Audio
- Intel® Matrix Storage Technology
- Intel® Active Management Technology
- Serial ATA (SATA) 3 Gb/s
- Dual-Channel DDR2 Memory Support
- Intel® Flex Memory Technology

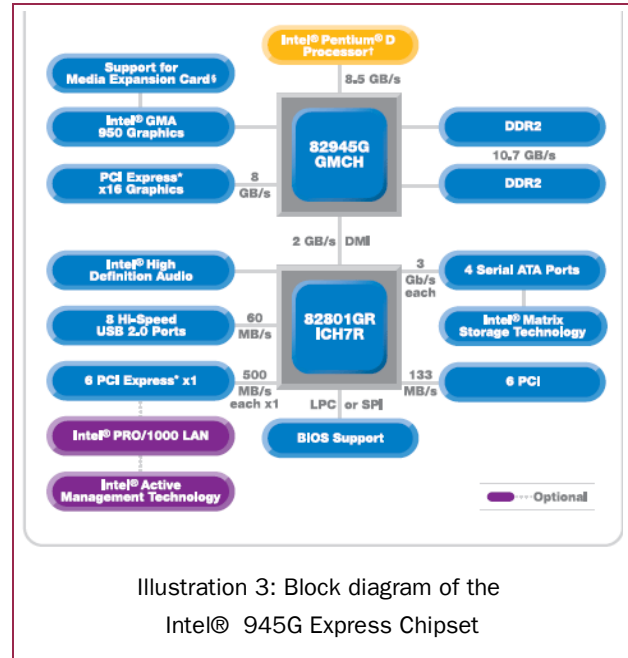
| Features                | Intel® 945GC             |
|-------------------------|--------------------------|
| Processor Support       | Intel® Atom              |
| Front Side Bus          | 1066/800/533 MHz         |
| Memory Support          | DDR2 533/400 MHz         |
| Max Memory              | 4.0GB                    |
| PCIx Support            | PCI Express x16 graphics |
| North-South Bridge Link | DMI (2GB/s)              |
| Graphics Core           | Intel® 950GMA            |

### Intel® Graphics Media Accelerator 950

- 400MHz 256-bit graphics core
- 192 MB maximum video memory
- 2048x1536 at 75 Hz maximum resolution
- High Performance 3D
  - DirectX® 9 Hardware Acceleration
  - OpenGL® 1.4 support with ARB extensions
- High Quality Media Support
  - High Definition Hardware Motion Compensation to support HD hi-bitrate MPEG2 media playback
  - Up and Down Scaling of Video Content

### Intel® Atom™ Processor - built with the world's smallest transistors

- Small Form Factor CPU Package – 45nm manufacturing technology



- 533 MHz FSB, 1.60GHz frequency, single and dual core configurations
- Low Thermal Design Power (TDP) – TDP of 4W @ 1.6GHz single core, 8W for dual core
- Power-Optimized Front Side Bus
- Intel® Advanced Smart Cache
- Security features – NX bit
- Multimedia support – SSE1, SSE2 and SSE3
- Cache – 32KB instruction, 24KB data, 512KB L2.
- x86-64 instruction set architecture
- Intel® Hyper-Threading Technology – thread level parallelism for more efficient use of processor resources and improved performance



## Salient Features of the Hardware

- Low power consumption
  - Ability to easily operate from alternative sources of energy such as solar energy
  - Ability to operate from a car battery for 10 hours
- No moving parts
  - Minimal wear and tear
  - Minimal noise pollution
  - Minimal power consumption
- Fanless design
  - Eliminates dust accumulation by fans
  - Eliminates vibration and noise caused by fans
  - Eliminates overheating and failures caused by failure of fans
  - Eliminates power consumption by fans
- Small and light – much easier to transport.



## Software Specification

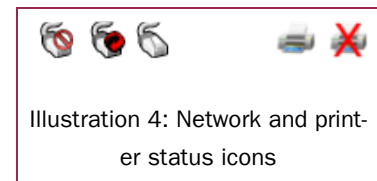
Digital signage computers run an enhanced version of Thinvent's embedded Linux, Thinix. The salient features of Thinix are:

- Built-in remote management and monitoring
- A wide array of built-in applications
  - Web Browser, with flash, multimedia, PDF and other popular plugins.
  - Audio and Video players
  - Image management and manipulation software
- Small footprint of less than 256 MB
- Support for Networking Protocols:
  - Remote desktop client
  - MS Windows file sharing
  - FTP client and server
  - SSH client and server
  - VNC server and client

In addition, Thinvent works with end customers and adds applications that suit their requirements.

### User Interface Customisation

- Full support for localisation – user interface and applications in Indian languages such as Hindi and Tamil. Support for web browsing and content display in all Indian languages.
- Autostarting of applications in kiosk mode. Application opens in full screen mode and cannot be minimised or closed. Various keys and right click can be disabled. Server or network failure is gracefully notified to the user.
- Touchscreen, smartcard and biometric integration.
- Dual display configuration for digital signage and POS.



To know more about Thinvent's products for rural IT projects, please get in touch with our sales team at [rural@thinvent.in](mailto:rural@thinvent.in).

