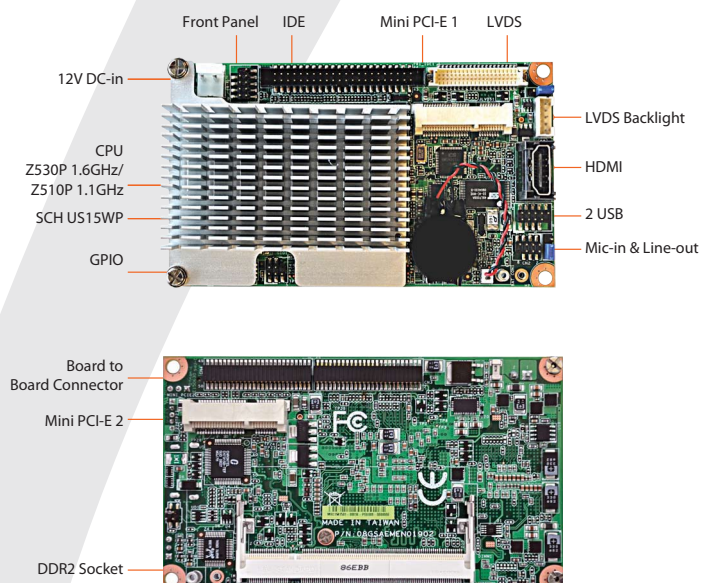


# NX15MXL2

Intel® Atom™ Z510P/ Z530P Processor 2.5" Single Board Computer



## Features

- Onboard Intel® Atom™ Z510P 1.1GHz/ Z530P 1.6GHz CPU
- Intel System Controller Hub US15WP
- One 200-pin SODIMM up to 2GB DDR2 400/ 533 SDRAM
- Supports HDMI & 18/24-bit LVDS Dual Display
- Realtek ALC888, 5.1 + 2 Channel with 2 independent HD Streaming Audio
- 2 Mini PCI-E, 2 USB 2.0, 4-bit GPIO, 1 IDE
- Supports versatile optional functions by board to board connector
- 12V DC-in

Intel Atom

Dual Display

18/24-bit LVDS

HDMI

Mini PCI-E

GPIO

5.1 + 2 CH HD Audio

Fanless Design

Flexible I/O Board Design

## Specifications

### System

|                           |  |
|---------------------------|--|
| <b>CPU</b>                | Onboard Intel® Atom™ Z510P 1.1GHz/ Z530P 1.6GHz CPU with 45nm process technology |
| <b>FSB</b>                | 400/533 MHz  |
| <b>BIOS</b>               | Award 8Mb FWH BIOS   |
| <b>System Chipset</b>     | Intel System Controller Hub US15WP   |
| <b>System Memory</b>      | One 200-pin SODIMM socket supports up to 2GB DDR2 400/533MHz SDRAM               |
| <b>Watchdog Timer</b>     | Reset : 1 to 255 sec/min per step  |
| <b>H/W Status Monitor</b> | Monitoring CPU temperature status.<br>Auto throttling control when CPU overheats |
| <b>Expansion</b>          | 2 Mini PCI-E   |
| <b>Power State</b>        | S1, S3, S4, Never Sleep  |

### I/O

|             |   |
|-------------|---|
| <b>MIO</b>  | 1 IDE, 1 Board to Board Connector supports optional functions |
| <b>USB</b>  | 2 USB 2.0   |
| <b>GPIO</b> | 4-bit General Purpose I/O for 2-bit DI and 2-bit DO           |

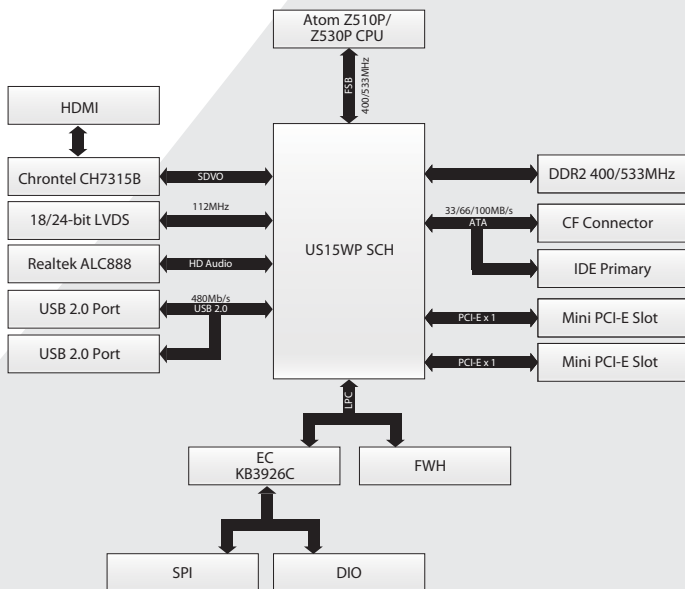
### Display

|                           |  |
|---------------------------|--|
| <b>Chipset</b>            | Intel® System Controller Hub US15WP  |
| <b>Display Memory</b>     | Intel® Graphics Media Accelerator 500  |
| <b>Max. 3D Resolution</b> | LVDS Display : 1366 x 768 @85 Hz<br>Ext Display: 1920x1080 @ HDMI-to-HDMI<br>1440x1050 @ HDMI-to-DVI |
| <b>Dual Display</b>       | Yes, LVDS + HDMI   |
| <b>LVDS</b>               | Yes, 18/24-bit single channel  |
| <b>LVDS Backlight</b>     | Yes, 5V and 12V  |
| <b>HDMI</b>               | Chrontel CH7315B supports 1080i/ 720P Resolution   |

### Audio

|                        |                                     |
|------------------------|-------------------------------------|
| <b>Audio Codec</b>     | Realtek ALC888, 5.1 + 2 CH HD Audio |
| <b>Audio Interface</b> | Line-out & Mic-in                   |

## Block Diagram



### Ordering Information

#### NX15MXL2

90P-POU000-10000B2  
 NX15MXL2-C11 2.5" SBC  
 90P-POU000-10001B2  
 NX15MXL2-C16 2.5" SBC

### Product Offering

until 2017

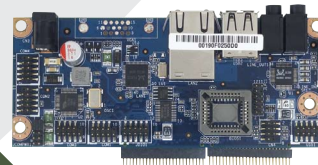
### Packing List

|                       |     |
|-----------------------|-----|
| IDE Cable             | x 1 |
| USB Cable             | x 1 |
| Audio Cable           | x 1 |
| 12V DC-in Power Cable | x 1 |
| Driver CD             | x 1 |
| Startup Manual        | x 1 |

### Optional Accessory

|                |                              |
|----------------|------------------------------|
| 14GS0000063V04 | 2 Port USB Cable w/o Bracket |
|----------------|------------------------------|

### AD-1019 Extension Board



### I/O

|             |  |
|-------------|--|
| <b>MIO</b>  | 4 COM RS-232   |
| <b>USB</b>  | 4 USB 2.0  |
| <b>GPIO</b> | PCA9555 supports 8-bit General Purpose I/O for 4-bit DI and 4-bit DO |

### Display

|            |                             |
|------------|-----------------------------|
| <b>VGA</b> | On board, supported by SDVO |
|------------|-----------------------------|

### Audio

|                        |                                       |
|------------------------|---------------------------------------|
| <b>Audio Codec</b>     | Realtek ALC888, 5.1 + 2 CH HD Audio   |
| <b>Audio Interface</b> | Line-in, Line-out, Mic-in, S/PDIF Out |

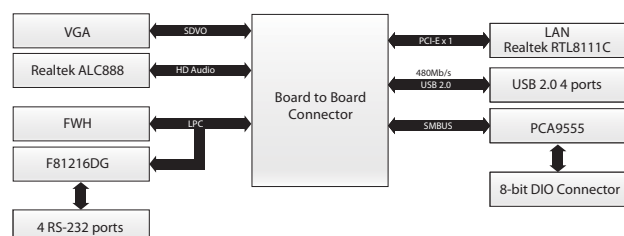
### Ethernet

|            |                              |
|------------|------------------------------|
| <b>LAN</b> | Realtek RTL8111C Gigabit LAN |
|------------|------------------------------|

### Environment

|                   |           |
|-------------------|-----------|
| <b>Power Type</b> | 12V DC-in |
|-------------------|-----------|

### AD-1019 Block Diagram



### Internal I/O Connector

- 1 USB Connector supports 2 USB Ports
- 1 12V DC Power in pin Header
- 1 LVDS Connector
- 1 IDE Connector
- 1 Mic-in/ Line-out Header
- 1 HDMI
- 1 GPIO Connector

### Mechanical & Environmental

|                              |   |
|------------------------------|---|
| <b>Power Requirement</b>     | +12V<br>1.2A  |
| <b>Power Type</b>            | 12V DC-in   |
| <b>Power Connector</b>       | 1 12V DC-in Power Connector                               |
| <b>Operating Temperature</b> | 0 to 60°C (32 to 140°F)                                   |
| <b>Operating Humidity</b>    | 0% to 90% relative humidity, non-condensing               |
| <b>Size (L x W)</b>          | 120 mm x 70 mm  |
| <b>Weight</b>                | 0.15 lbs(70g) w/o Heatsink,<br>0.33 lbs(150g) w/ Heatsink |

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