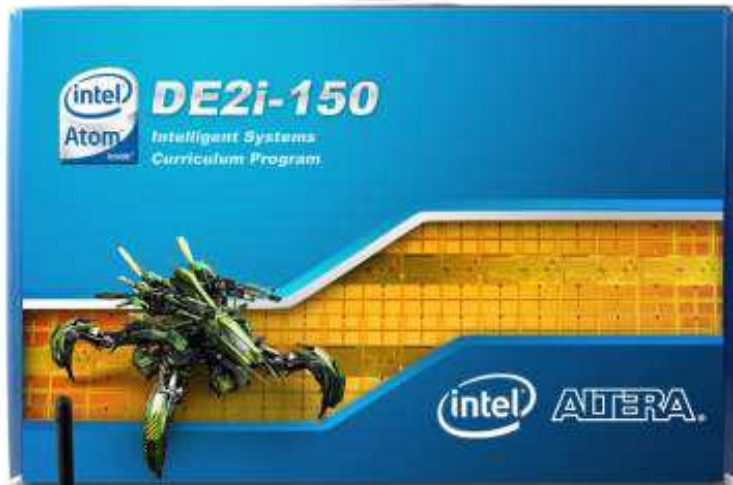


# DE2i-150 FPGA Development Kit (P0126)



# DE2i-150 Kit Contents



- Development Board
- System CD
- Quartus II CD
- Quick Start Guide
- USB Cable
- Power Cable
- IR Remote
- Loopback Board



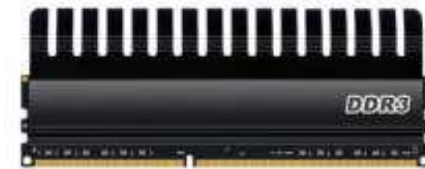
# Included Kit Accessories



64GB mSATA  
SSD

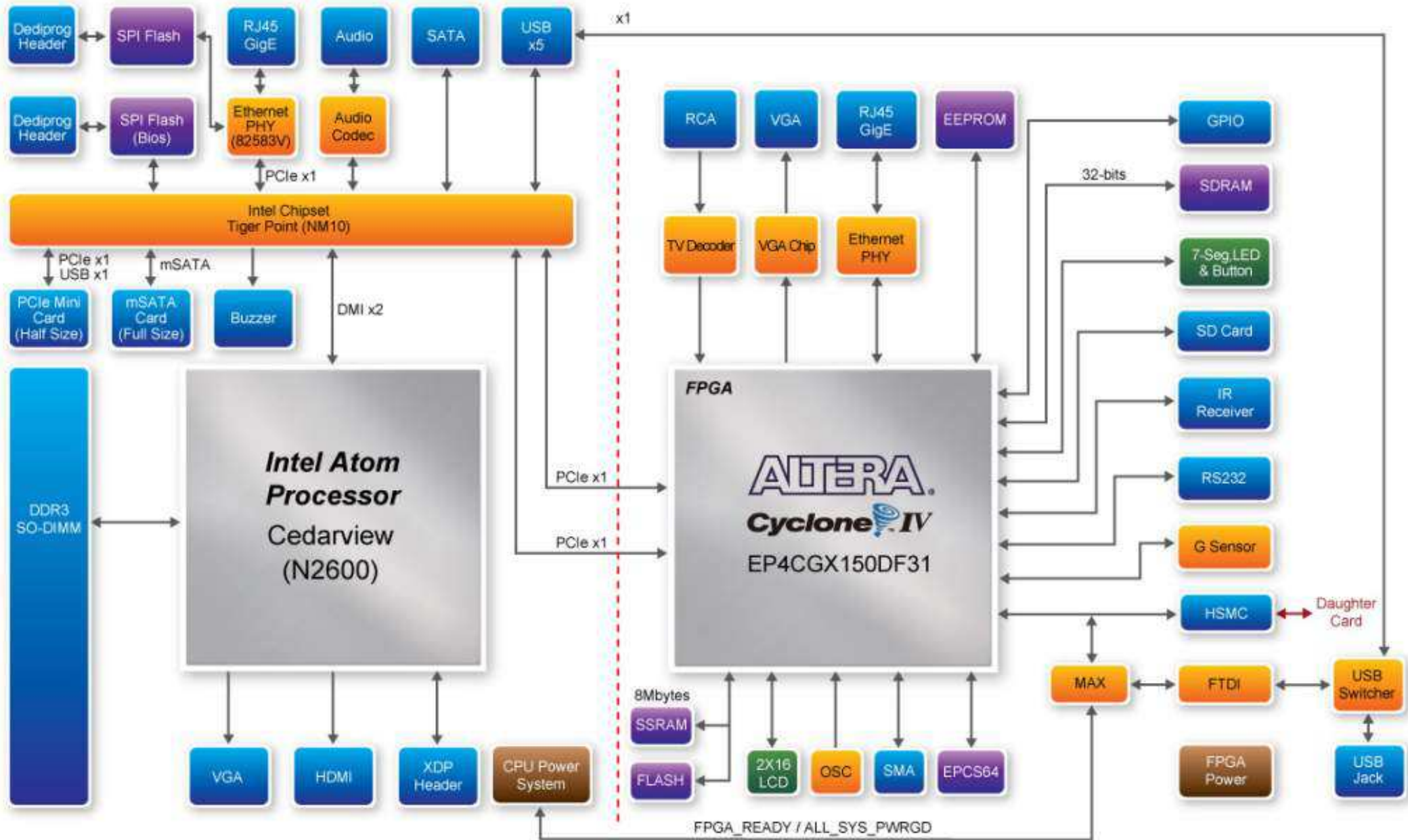


802.11a/g/n  
Wi-Fi Module

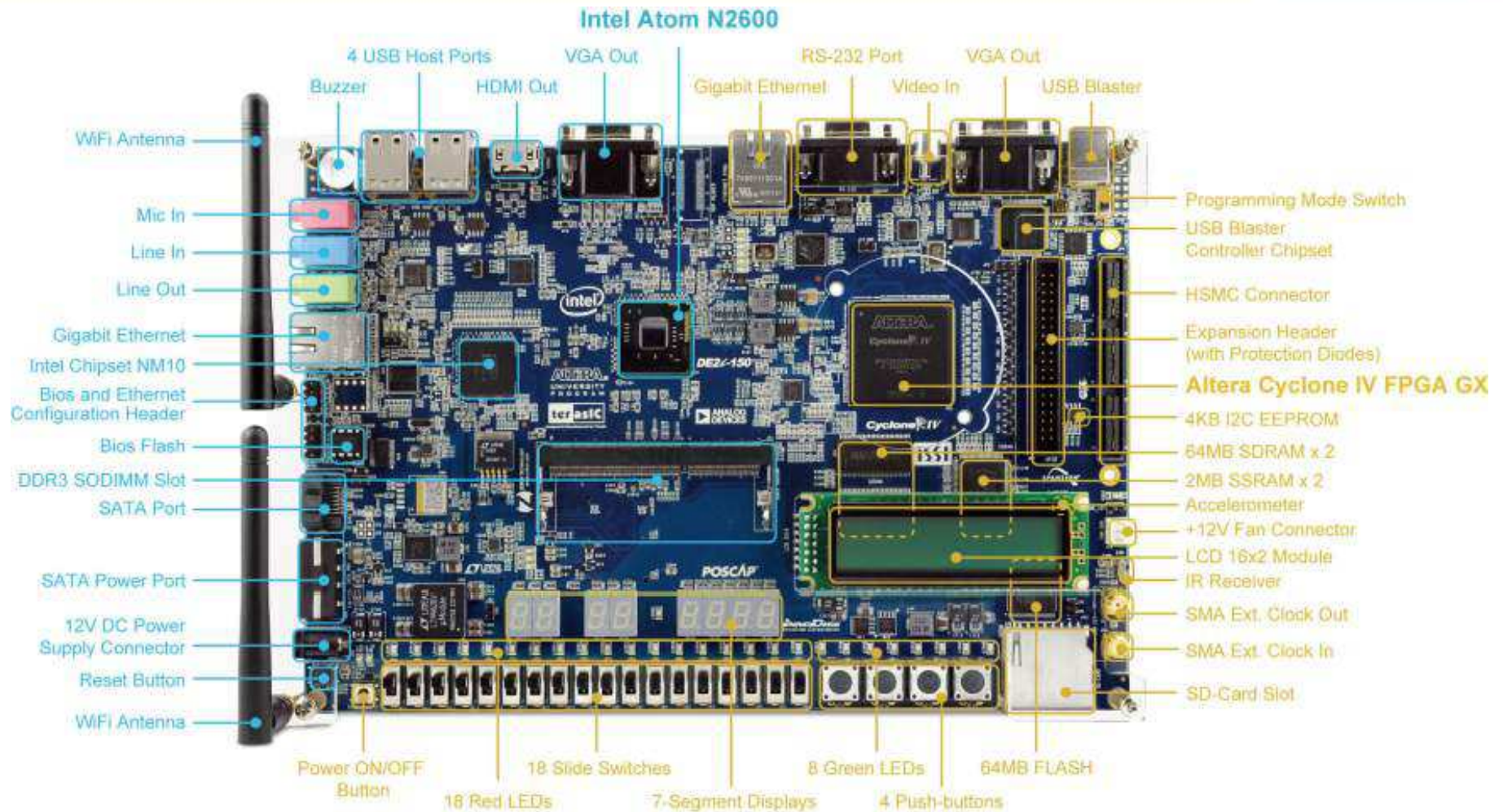


DDR3 Memory

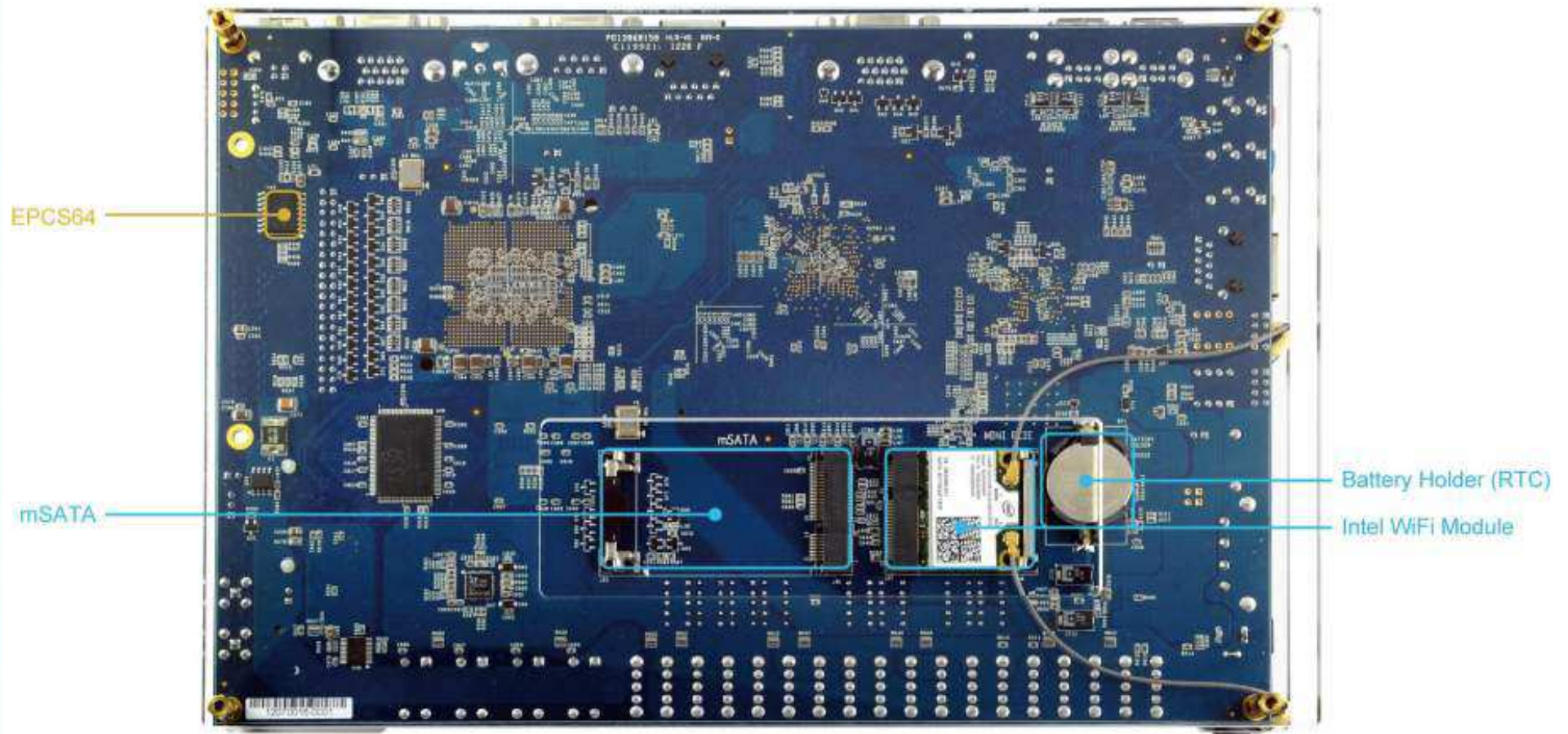
# DE2i-150 Block Diagram



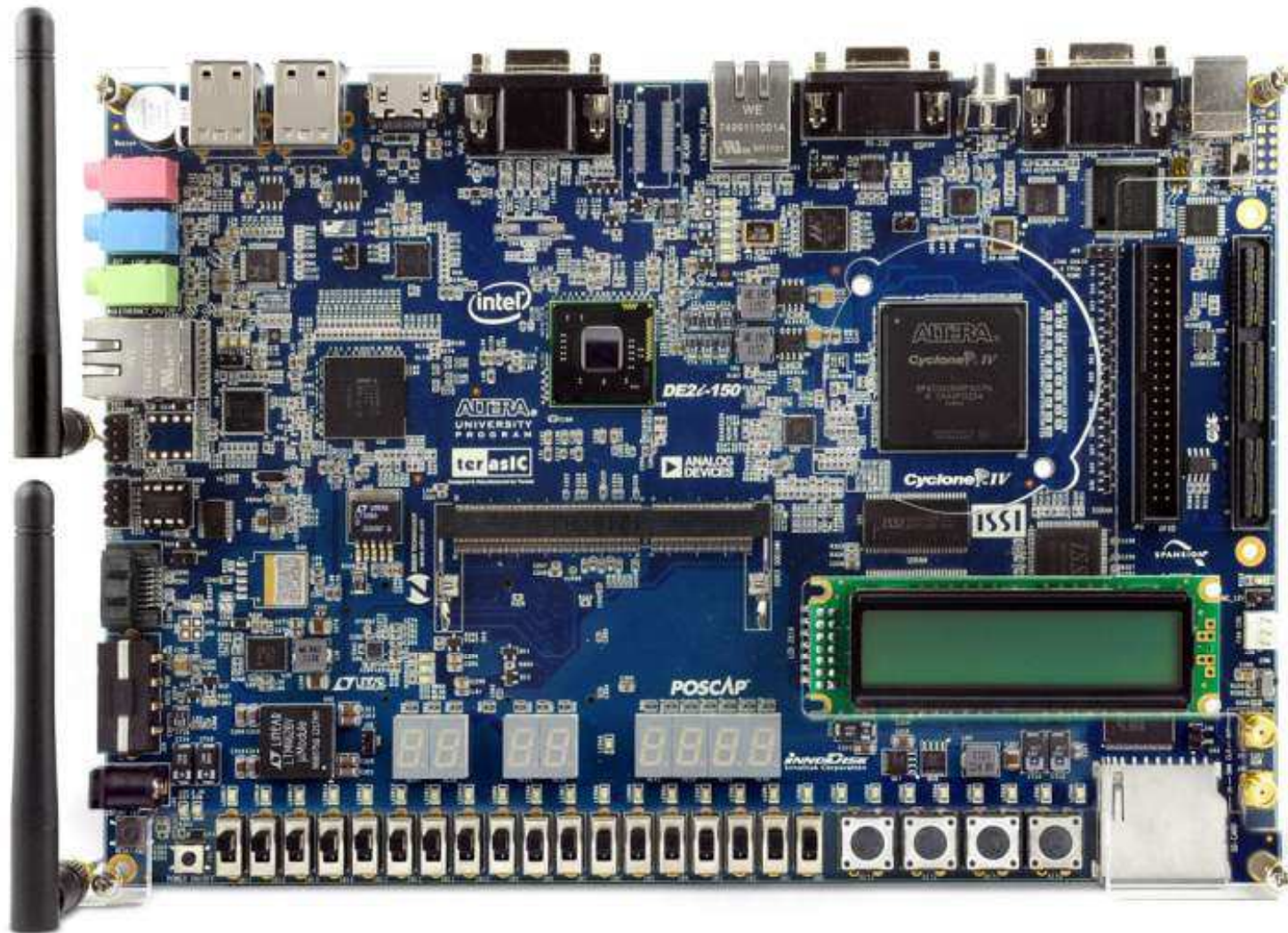
# DE2i-150 Floorplan



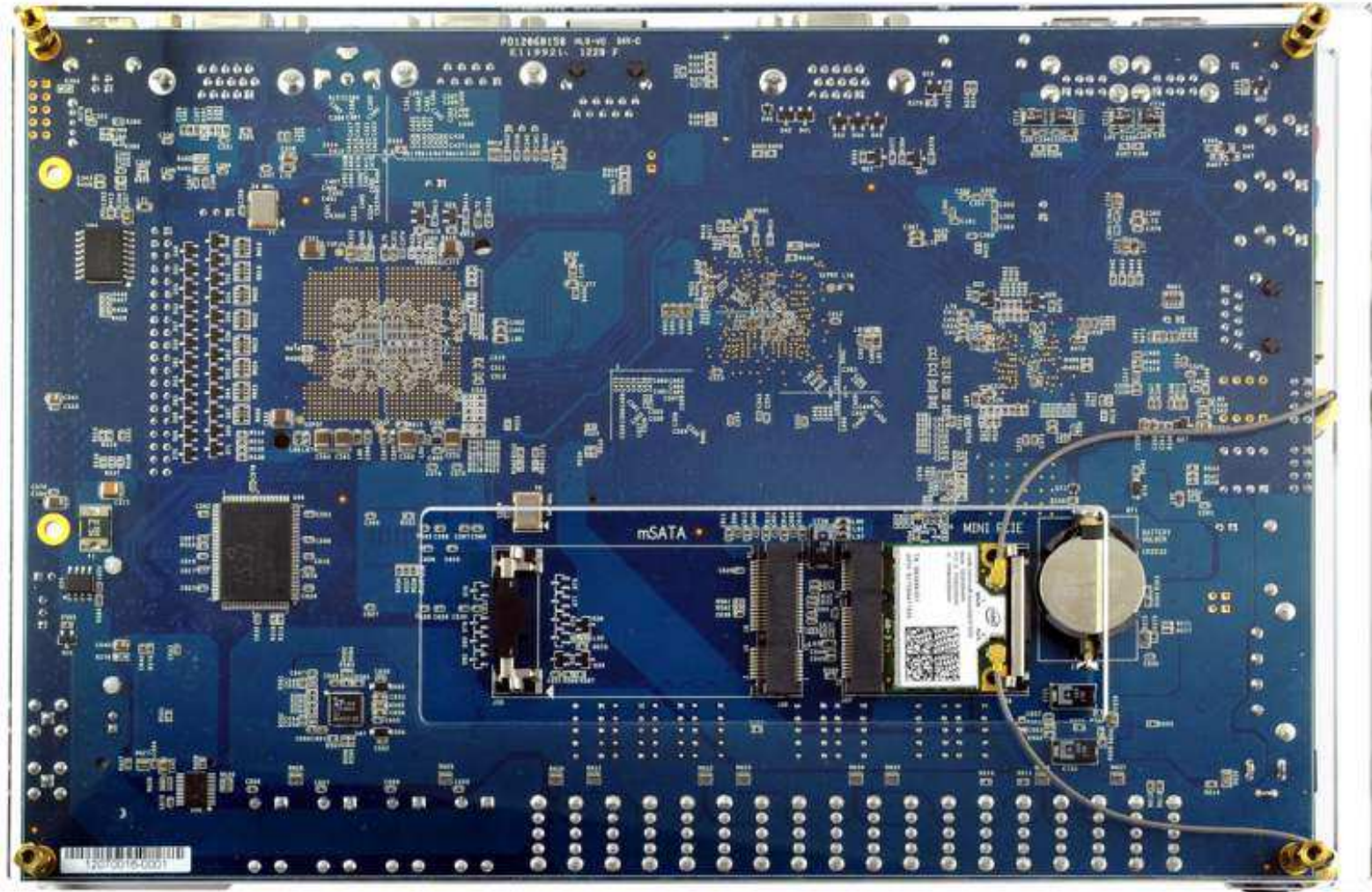
# DE2i-150 Floorplan



# DE2i-150 Front

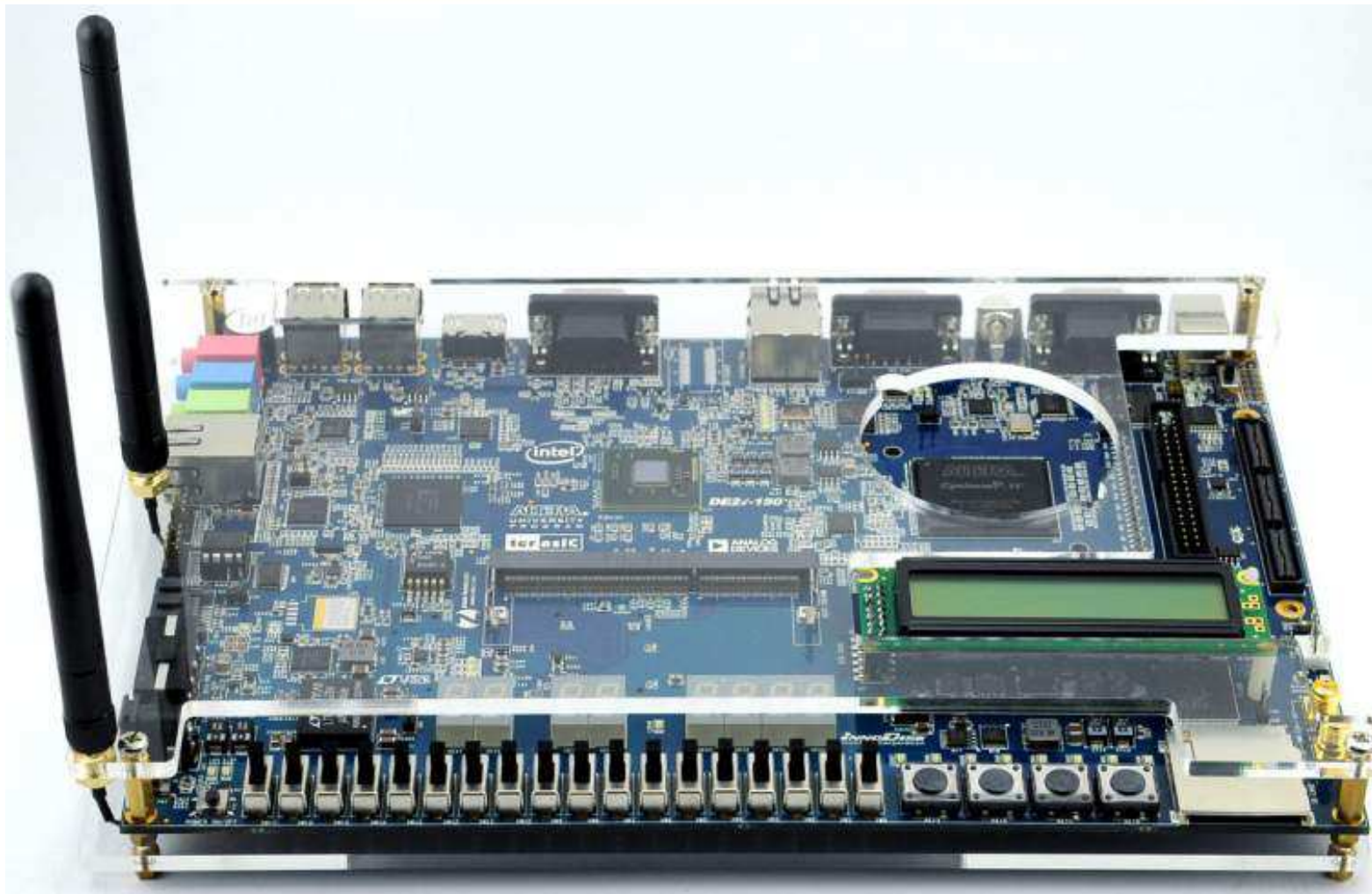


# DE2i-150 Back





# DE2i-150 Angle 1



# DE2i-150 Angle 2



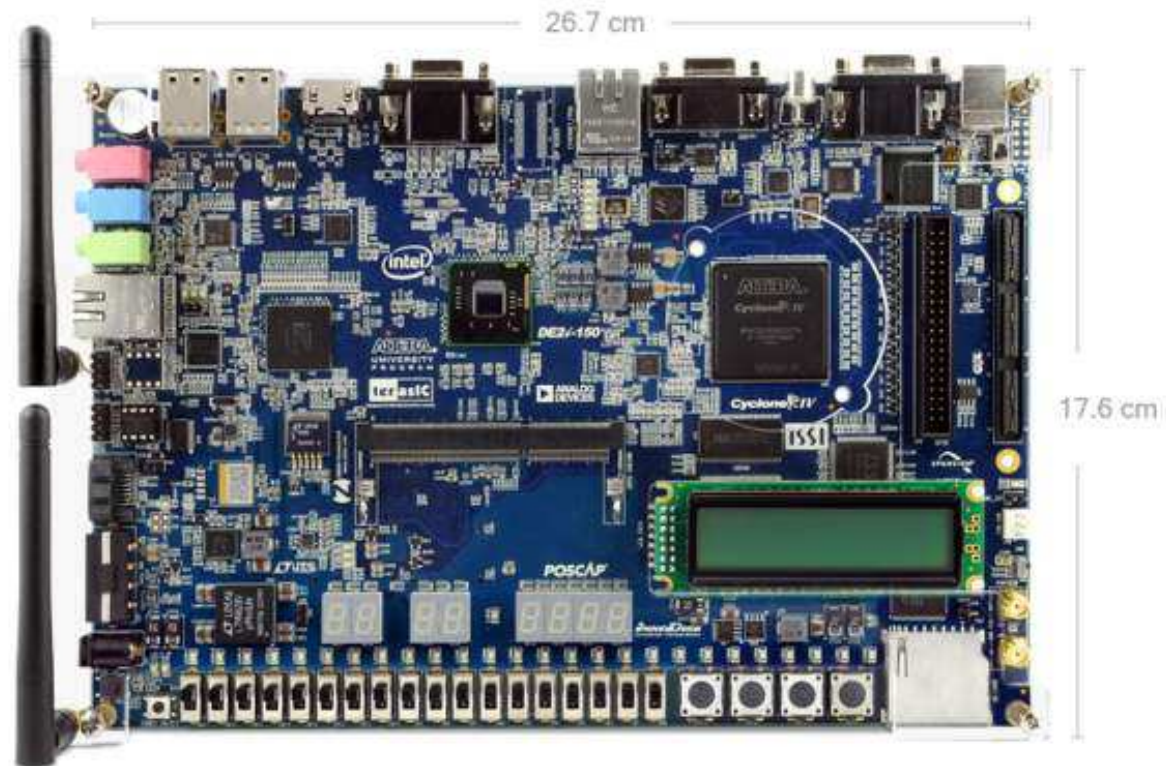
# DE2i-150 Side



# DE2i-150 Rear

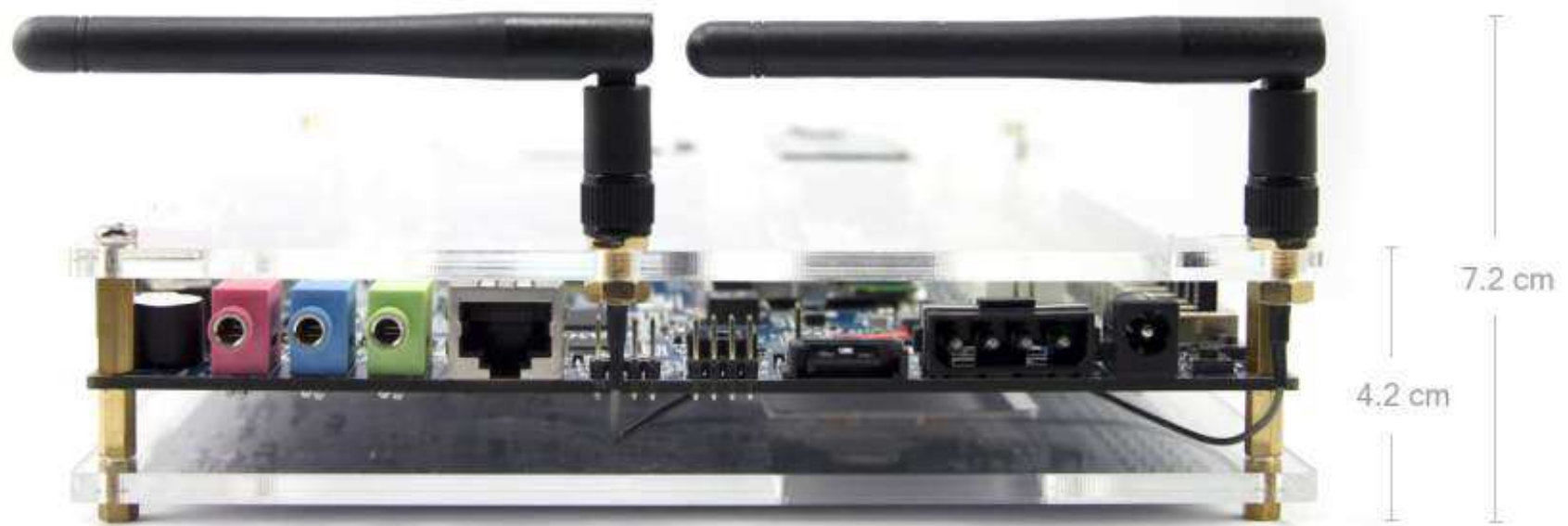


# DE2i-150 Measurements



Weight : 470 g  
Weight with Acrylic : 820 g

# DE2i-150 Measurements (2)



# Kit Partners



ZEBOR TECHNOLOGY



**Panasonic**  
ideas for life

**innODISK**

# Cyclone 4 GX-based Features

- VGA Display, TV Decoder (Composite Input)
- Gigabit Ethernet
- SD Card Socket
- IR Receiver, RS232
- Accelerometer
- HSMC & GPIO Expansion Connector
- EEPROM, Flash, SSRAM, SDRAM, and EPCS64(for FPGA Configure)
- Two PCIe x1 (Connected to Intel Atom)
- On board Oscillator and SMAx2 for External Clock Input & Output
- LED, 2x16 LCD, Button, Switch & 7-Segment
- On-board USB Blaster





# Intel Atom-based Features

- Audio Input & Output
- HDMI 1.3a
- VGA
- PCIe Mini Card (Half-Size)
- mSATA Card (Full-Size)
- USB 2.0 Host x4
- 10/100/1000 M Ethernet
- SATA Gen2
- DDR3 SO-DIMM Socket



# Cyclone IV Links

## **Cyclone IV Device Handbook:**

<http://www.altera.com/literature/hb/cyclone-iv/cyclone4-handbook.pdf>

## **Cyclone IV Datasheet:**

<http://www.altera.com/literature/hb/cyclone-iv/cyiv-51001.pdf>

# Teaching Material

## **Altera University Program FPGA Training:**

[http://www.altera.com/education/univ/materials/digital\\_logic/tutorials/unv-tutorials.html](http://www.altera.com/education/univ/materials/digital_logic/tutorials/unv-tutorials.html)

## **Altera University Program Lab Exercises:**

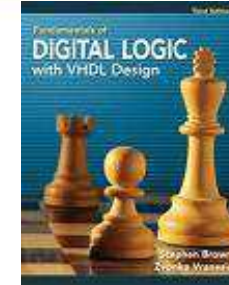
[http://www.altera.com/education/univ/materials/digital\\_logic/labs/unv-labs.html](http://www.altera.com/education/univ/materials/digital_logic/labs/unv-labs.html)

# Teaching Material (2)

## *Fundamentals of Digital Logic with VHDL/Verilog Design*

by Dr. Stephen Brown and Dr. Zvonko Vranesic

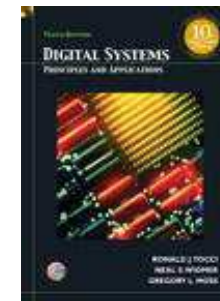
<http://www.amazon.com/dp/0077221435/>



## *Digital Systems: Principles and Applications, 10/E*

by Ronald Tocci, Neal Widmer and Gregory Moss

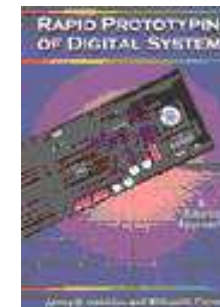
<http://www.amazon.com/dp/0131725793/>



## *Rapid Prototyping of Digital Systems*

by James O. Hamblen and Michael D. Furman

<http://www.amazon.com/dp/0792386043/>



# Daughter Card Solutions



Capacitive Touch  
Screen



CameraLink Adapter



5 Megapixel Camera



HDMI Input



DVI Input/Output



Ethernet



Serial Digital  
Interface



Altera Industrial  
Communications



HDMI Output



Aptina Adapter

Daughter Cards are available for purchase at:

<http://cards.terasic.com>

# Daughter Card Solutions (2)



[AD/DA](#)



[Mass Storage and Video](#)



[High Speed AD/DA](#)



[Communication](#)



[SATA/SAS](#)

Daughter Cards are available for purchase at:

<http://cards.terasic.com>