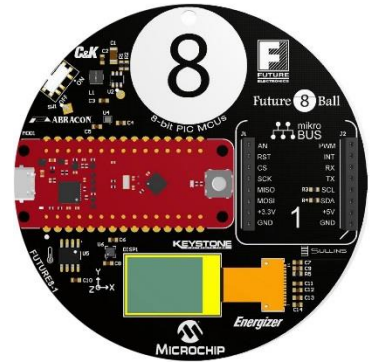


## QUICK START GUIDE

Future 8 Ball brings to life an effortless design solution that promotes 8-bit PIC® microcontrollers, low power analog, temperature sensors and OLED displays. The board allows developers of all skill levels to easily bring their ideas to life.



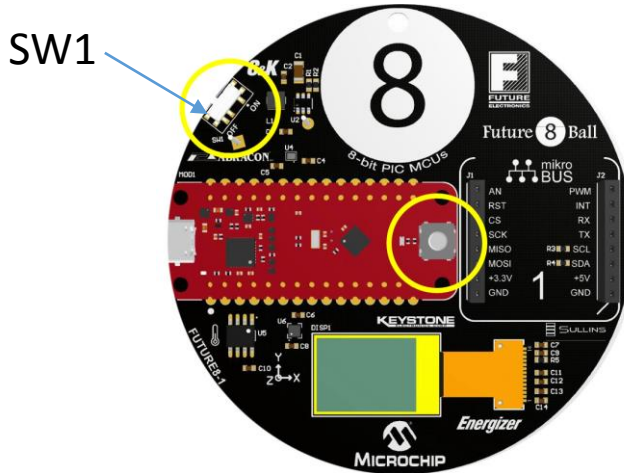
The board showcases the following devices:



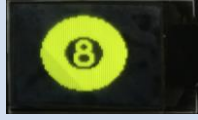

- PIC16F18446: 8-bit product family features high resolution, Intelligent Analog and Core Independent Peripherals (CIPs) for sensor end node applications while the Nano Curiosity board DM164144 will allow you the ability to program and debug your development journey through the MPLAB® ecosystem.
- MCP16251/2: is a compact, high-efficiency, fixed frequency, synchronous step-up DC-DC converter, providing an easy-to-use power supply solution for applications powered by either one-cell, two-cell or three-cell alkaline, NiCd, NiMH and one-cell Li-Ion or Li-Polymer batteries.
- MIC5504 : is an advanced general-purpose LDO ideal for powering general-purpose portable devices. The MIC5501/2/3/4 family of products provides a high-performance 300mA LDO in an ultra-small 1mm x 1mm package.
- AT30TSE754A: temperature sensor is capable of measuring and converting temperatures from -55°C to 125°C to a digital word and provides a typical accuracy of ±0.5°C over the operating temperature range of 0°C to 85°C.
- WEO004864ALPP3N00000: Winstar Display OLED 48 x 64 3.3V I2C
- E92VP: – Energizer battery AAA Alka-Zinc/Mang Dioxide 1.5V
- PPTC081LFBN-RC: Sullins Connector Dual 1Row Vert TH 1 x 8 2.54mm Socket Header – MIKROBUS\_A, MIKROBUS\_B
- ASPI-0315FS-4R7M-T2: Abracon Inductor 3.0x3.0 SM 4.7uH 1.24Art 100mOh : Abracon
- 2468: Keystone Battery Holder 2 AAA PCB Mount 53X24.6mm



## QUICK START GUIDE

First, turn on the 8 Ball via switch SW1. It will start in the Temperature Mode. To cycle through the four modes, depress the button which is located in the center of the board:



Button	Mode	Description	Example
Default or 4 <sup>th</sup> button push	Temperature	Shows surrounding temperature in Celsius and Fahrenheit alternately.	
1st button push	Orientation	Detects orientation of the board	
2nd button push	Future 8 Ball	Ask a question, shake the 8 Ball, and it will display a new random answer!	
3rd button push	Banner	It will cycle through 3 stock images	

Please switch off the demo to conserve the battery life.

\*In order to do a print out to the serial terminal during development, please insert and power using batteries then connect through USB.