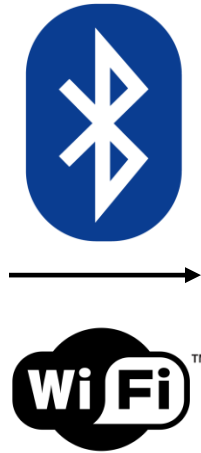




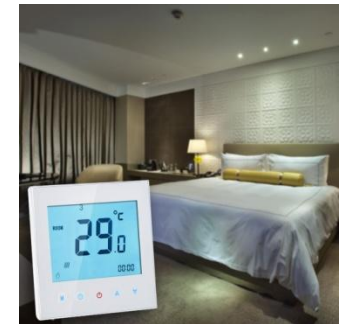
<Control Switch>



<Room Controller>



<Light Control>



<Temp Control>

□ Microchip MCU, ATMEGA88PA-AU

- PicoPower 8-bit AVR RISC-based microcontroller
- 8KB ISP flash memory with read-while-write capabilities, 512B EEPROM, 1KB SRAM
- 23 general purpose I/O lines, 32 general purpose working registers
- three flexible timer/counters with compare modes
- internal and external interrupts
- serial programmable USART, a byte-oriented 2-wire serial interface, SPI serial port
- 6-channel 10-bit A/D converter (8-channels in TQFP and QFN/MLF packages)

□ Microchip MCU, ATSAMW25H18-MR210PB

- ARM® Cortex®-M0+ based microcontroller
- IEEE 802.11 b/g/n (1x1) for up to 72 Mbps
- Integrated PA and T/R switch
- Superior sensitivity and range via advanced PHY signal processing
- Wi-Fi Direct, station mode and SoftAP support
- 8 Mbit internal flash memory with OTA firmware upgrade
- TCP/IP protocol stack (client/server) sockets applications
- Network services; DHCP, DNS, TCP/IP (IPv4), UDP, HTTP, and HTTPS

❑ Microchip Regulator, MCP1640T-I/CHY

- 500kHz 800mA I_{sw} Synchronous PFM/PWM Boost Regulator
- Up to 96% Typical Efficiency
- I_{OUT} > 100 mA @ 1.2V V_{IN}, 3.3V V_{OUT}
- I_{OUT} > 350 mA @ 2.4V V_{IN}, 3.3V V_{OUT}
- I_{OUT} > 350 mA @ 3.3V V_{IN}, 5.0V V_{OUT}
- Low Start-up Voltage: 0.65V
- Operating Input Voltage: 0.35V

❑ Microchip Sensor, TC74

- Digital Temperature Sensing in SOT-23-5 Package
- Outputs Temperature as an 8-Bit Digital Word
- Simple Serial Port Interface
- ±2°C Accuracy from +25°C to +85°C
- ±3°C Accuracy from 0°C to +125°C
- Supply Voltage of 2.7V to 5.5V

❑ Microchip Battery Charge Controller, MCP73213

- Dual Cell Li-Ion/Li-Polymer Battery Charge Management Controller
- Complete Linear Charge Management Controller:- Integrated Input Overvoltage Protection- Integrated Pass Transistor- Integrated Current Sense- Integrated Reverse Discharge Protection
- Constant Current / Constant Voltage Operation with Thermal Regulation
- Resistor Programmable Fast Charge Current: 130 mA - 1100 mA
- 4.15V Undervoltage Lockout (UVLO)
- 18V Absolute Maximum Input
- Overvoltage Protection (OVP): 13V