

# Technology & Design

Applications and UX / UIx	<b>Sensor Solution</b>						<b>UX/UI</b>	
	T & H Sensor Sensirion SHT40	VCO2 Sensor Sensirion SCD40	PM1.0/ PM2.5 / PM10 Panasonic - SN - GCJA5	Light Sensor ROHM - BH1721FVC	Formaldehyde Sensor	iOS / Android Apps		
	TVOC Sensor ScioSense ENS160	PIR Sensor EKMC160111 (Pan)	Acceleration Sensor Bosch - BMA400	CO Sensor	O2 Sensor	NH3 Sensor	Voice skills Alexa & Google Assistant	
RF Solution (Telecom/Networking/Wireless)	<b>Wireless</b>			<b>Telecom / LPWA</b>	<b>Network</b>			
	WiFi4 + BLE 4.0 Solution	WiFi5 + BLE 5.0 Solution	LTE CAT M1 & NB-IOT Solution	HTTP / HTTPS, MQTT, TCP / UDP Modbus Protocol Node - Red Dashboard Development Customization.				
	WiFi 4 Soution	BLE- Nordic Solution	Quectel / Fibocom / SIMCom	Mesh ( BLE / WiFi)				
	UWB ( Ultra - wideband ) Solution	Thread / Zigbee / Matter Protocol		Beacon ( BLE )				
Platforms MCU & Soc	<b>MCU / SoC</b>					<b>Operating System</b>	<b>Cloud Platforms</b>	
	ST	Microchip	Weltrend	Cypress	Rockchip	Linux	RTOS	AWS / iCloud Google / Azure
Wireless Power	<b>Standard</b>				<b>Wireless Chip Solution</b>			
	1. Compliant with Qi WPC 1.2.4, PD 2. Power Class 0 BPP ( 5 W ) and EPP ( 15 W ) , up tp 100W 3. Power Tx design topologies MP - A2 and MP - A22				ST	iDT	Weltrend	SCP
Hub accessory	<b>HUB ( USB 3.0 )</b>		<b>HDMI Converter</b>					
	Genesys	VIA Labs	LONTIUM LT8711 Type - C/ DP1.4 to HDMI2.1 Converter Angoltek AG9321: DisplayPort 1.2 over USB - C to HDMI 1.4 / VGA converter with PD 3.0					



## A. Advanced Wireless & Inductive Charging Technology

- Reliable wireless & Inductive Charging performance and customer usability experience
- No risk to schedule
- We have over years of experience integrating and manufacturing Inductive Charging in mobile phone and tablet system .
- For this project' s OEM characteristics, JPC basically will follow up the design from customer for no matter EE or ME, however, we will actively feedback and share our engineering experience during the whole customer' s development process, to be a strong partner for not just pure manufacturing function and make this project much more easier for production by advanced plan during development stage.

## B. Extensive design experiences in wireless products

We have over 10 years of proven custom OEM/ODM peripheral projects execution meeting strict standards of top tier consumer electronics OEMs/ODMs

Radio Product Certification Laboratory is equipped with a full anechoic chamber. The Biconical , Log and horn antenna are used as the testing antennas to cover a frequency range of 26 MHz to 26 GHz.

The evolution and refinement of our product development process ensures timely and high quality product results

**qi WIRELESS POWER CONSORTIUM**

### Wireless Charger

Digital controller for Qi certified wireless power transmitters

1. Compliant with WPC 1.2.4
2. Power Class 0 BPP (5 W) and EPP (15 W)
3. Power Tx design topologies MP-A2 and MP-A22
4. Proprietary ST/DT Super Charge extension for high power charging
5. Support for half- and full-bridge topologies with input DC-DC
6. Operative range: 4.1 V to 24 V
7. Transmission efficiency can reach to 75%
- PS: Proprietary support to 30W .

Application:

Wireless Charger

Main Customer

### Remote Control

Remote Product & Wireless Interface

1. Voice Control
2. Media Center PC Remote
3. Display Remote
4. Presentation Remote
5. PMD (Personal Media Display)
6. 3 in 1 Touch PAD Smart TV and all in 1 system

Proprietary

Main Customer

Remote Control

### MFI & HUB Peripherals

We shipped more than 5 million units worldwide and provided products on an OEM/ODM basis for MFI & HUB Peripherals.

JPC engineers and experts successfully succeeded in the iPhone and iPad ported participated in Apple's "Open for iPhone" MFI Licensing program for more than 10 years.

MFI & HUB Peripherals

### IOT & Sensor product

Advanced Wireless Technology

JPC has over 10 years of experience integrating and manufacturing IOT product. Besides RF communication performance and customer usability experience, the shipment more than 10 million units worldwide and provided products on an OEM/ODM basis for IOT Peripherals.

IoT Market Trend & Technology Requirement & Key Elements

1. IoT Solution (Networking/Network, BT & ZBT & BLE, LTE, NB-IOT, Cat M, LoRa)
2. Sensor (Temperature/Humidity/Pressure/Weight/Distance/Distance/Speed/Altitude/Location)
3. Power (Energy Harvesting/Thin Film Solar/Thin Film/Thin Film/Thin Film)
4. Cloud Operation (Cloud/Cloud/Cloud/Cloud/Cloud/Cloud/Cloud/Cloud/Cloud/Cloud)

IOT & Sensor product

Contact Us

[www.jpcco.com](http://www.jpcco.com)

[sales@jpcco.com](mailto:sales@jpcco.com)

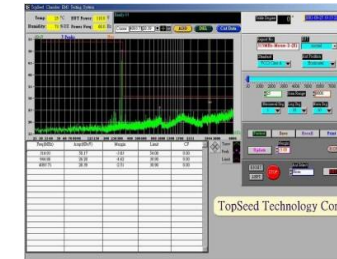


## *Electronic Product OEM/ODM Industrial Design*

The process of OEM/ODM industrial design encompasses several key steps, including conceptual design, 3D modeling, material selection, manufacturing processes, quality control, assembly, and testing. We utilize a variety of specialized equipment and software tools to achieve innovative and high-quality industrial design, meeting market demands.

### Process Flow

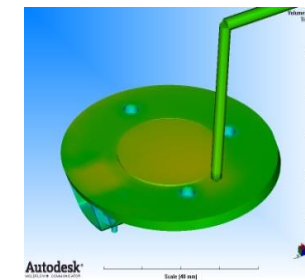
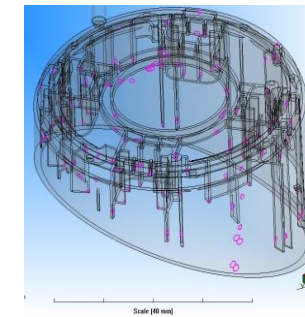
- 1. Conceptual Design:** The process begins with conceptual design, where designers and engineers collaborate to determine the visual features and functional requirements of the product. This stage typically involves the use of digital modeling software.
- 2. 3D Modeling:** Designers employ 3D modeling software to create detailed visual designs, including structural arrangements, dimensions, shapes, and materials.
- 3. Material Selection:** Materials are selected based on design requirements, considering factors such as strength, durability, weight, and aesthetics.
- 4. Manufacturing Processes:** The manufacturing processes for industrial design involve mold design, mold fabrication, injection molding, surface treatments, and more.
- 5. Quality Control:** Stringent quality control measures are implemented during production to ensure that the industrial design conforms to specifications.
- 6. Assembly and Testing:** Components are assembled into the final product, and rigorous testing is conducted to ensure that performance and appearance meet expectations.



Radio Products  
EMI Test &  
antenna test



Laboratory  
capability



Molding flow  
analysis



RP 3D System  
Mechanic parts

Contact Us

