

---

# Wireless Power Transfer Shield & Coil Assemblies



2011.07


# TopFlux is..

TopFlux is a member of Top Engineering Group.

**Equipment**



TOP ENGINEERING CO., LTD.  
Listed Company (Kosdak)  
LCD, LED Equipment



Dae Ha Engineering Co., Ltd.  
Mechanical Component  
Precision Machining  
and Assembly

**Material**



EMI & RFID Solution



Carbon Nano Tube Solution



Quantum Dot Solution



Fine Ceramic

**Module**



Listed Company (Kosdak)  
PCM, SM, BMS  
AMOLED/Camera Module

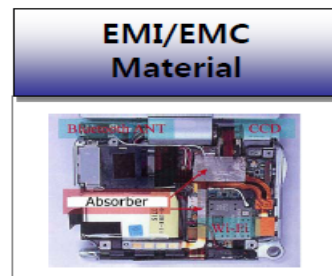
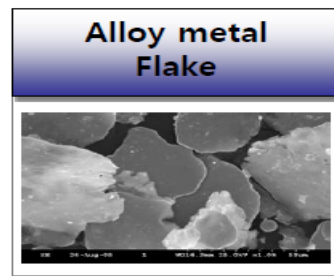


Secondary Protection Circuit IC  
of Battery and Battery Pack



FPCB

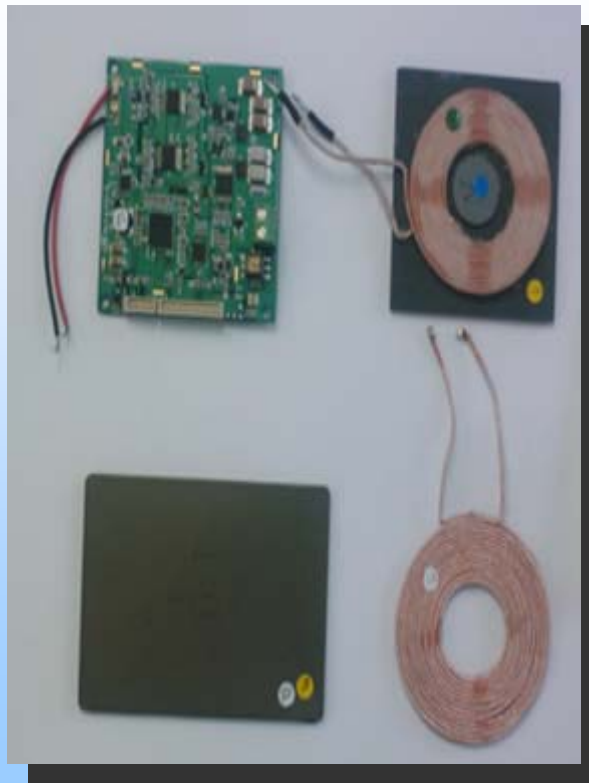
TopFlux is specialized in IT materials & Antenna(based on materials)



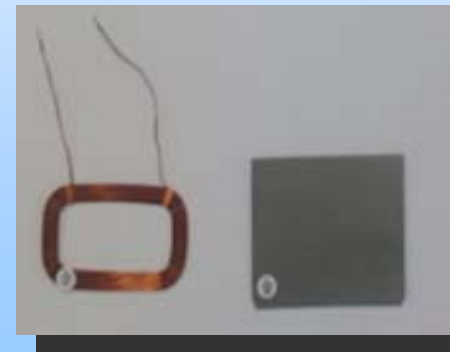
# TopFlux WPT Antennas(Shield+Coil)

TopFlux supplies antenna assemblies(shielding material + coil)

Primary(TX)



Secondary(RX)



# TopFlux Antennas's Charging Efficiency

## Charging Efficiency Test Result

항목	Out Power_Po(W)	Efficiency(%)						
		0.50	1.47	2.43	2.90	3.35	3.80	4.25
		Out Current(mA)	100	300	500	600	700	800
<b>Tx part</b>	<b>Rx part</b>							
TI KIT	TI KIT	29.1	55.4	67.2	69.2	70.5	69.2	69.9
Top Shield & Coil	TI KIT	29.1	59.6	70.8	69.0	70.3	68.8	69.6
Top Shield & Coil	Top Shield + TI Coil	29.1	59.5	69.2	68.8	70.1	68.6	67.3
TI KIT	Top Shield + TI Coil	32.7	59.7	67.1	69.1	70.5	69.0	69.9
TI KIT	TI Shield + Top Coil	29.1	55.4	67.2	67.7	70.5	69.0	67.8

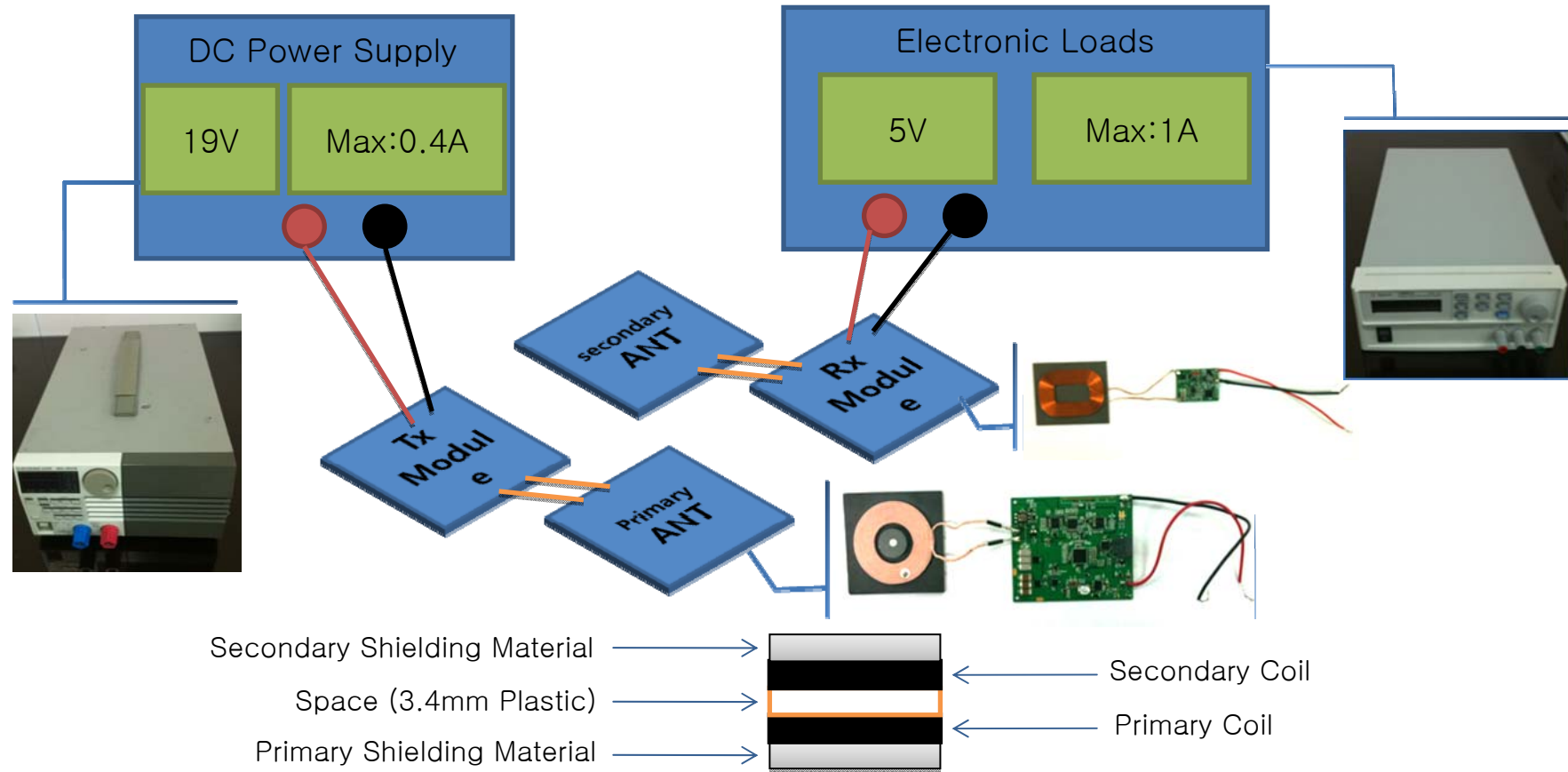


Test kit : TI Wireless Power Evaluation kit



TopFlux Rx Shield & Tx Antenna  
 -Top Rx Shield's Thickness = 0.6mm  
 (TI Rx Shield's Thickness = 0.8mm)

# TopFlux Efficiency Test Method



$$\text{Efficiency} = \frac{[\text{Load's Voltage}] \times [\text{Load's Ampere}]}{[\text{DC P/S's Voltage}] \times [\text{DC P/S's Ampere}]}$$

# TopFlux Shielding Material is..

---

TopFlux shielding material is not sintered but injection-molded products.

Injection-molded shielding material provides...

- Good properties of anti-shocking
- Improved design freedom
- Good quality control
- Ease of fabrication
- Weight reduction

TopFlux provided Rx shield with Verison wireless charging phone.

TopFlux's Tx shield listed in WPC Recommendable Parts List.