



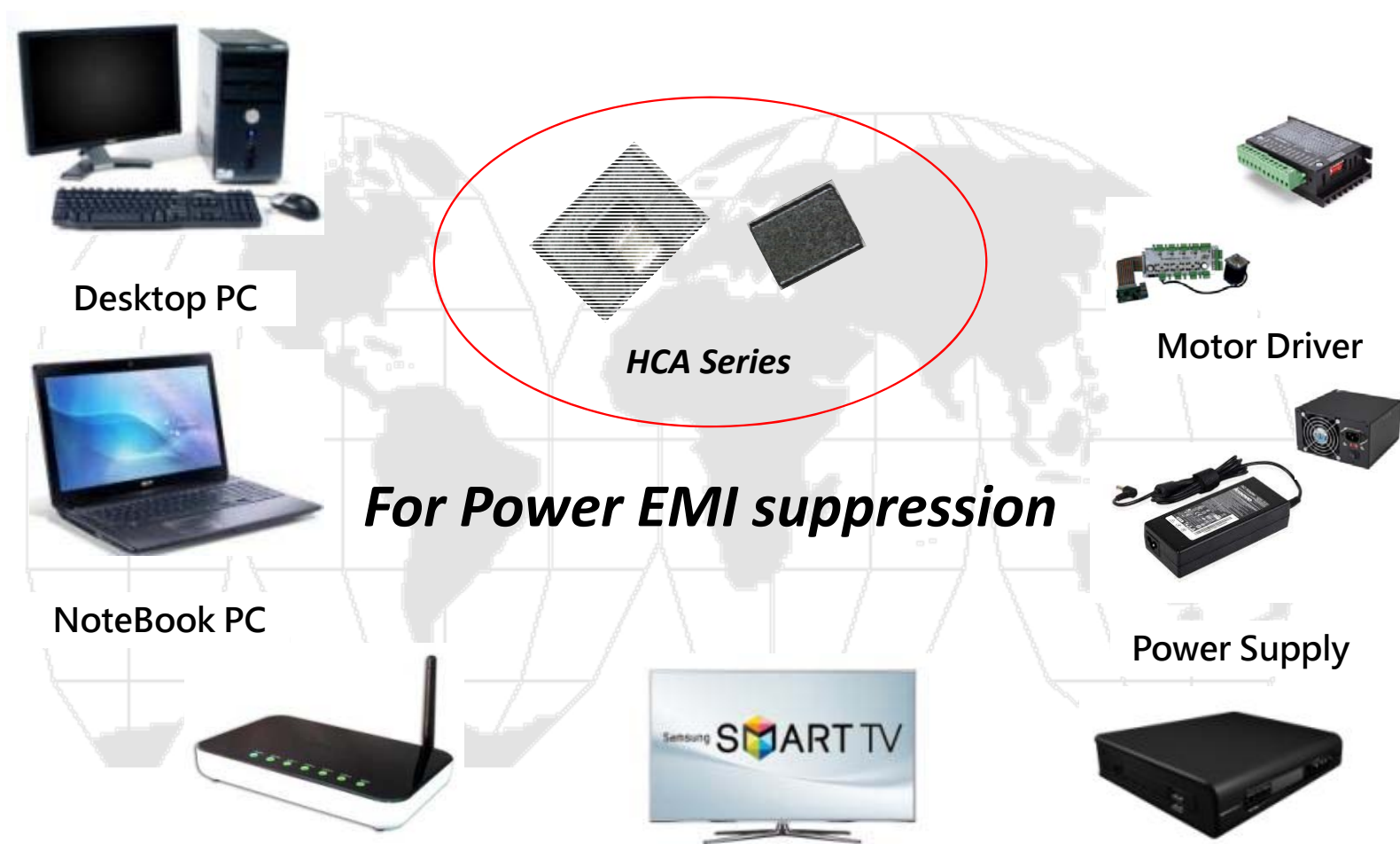
Ultra High Current Ferrite Beads ***HCA Series***



www.hsia.com.tw TEL:+886-2-2999-6691 FAX:+886-2-2999-6692

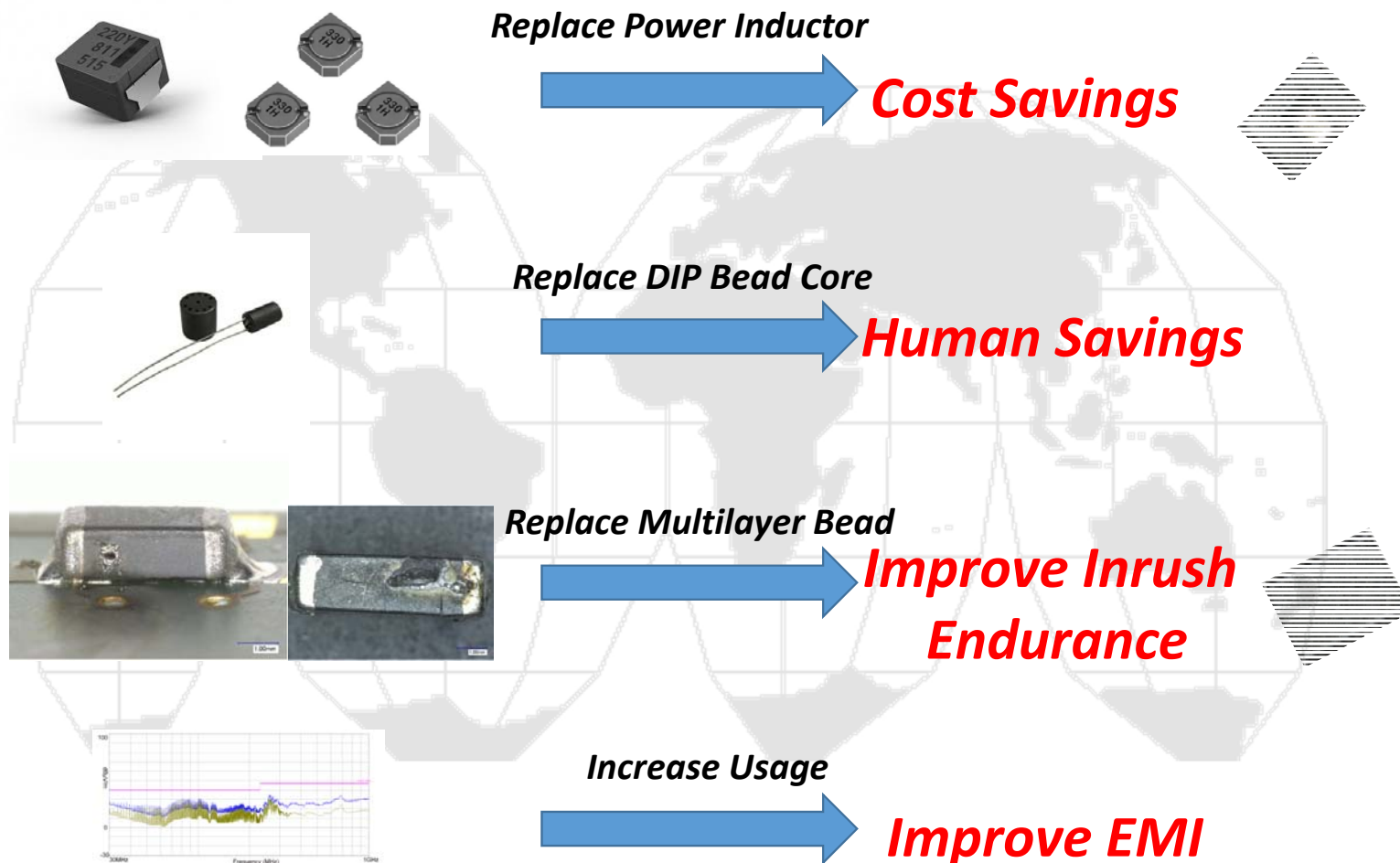


HCA Target Marketing

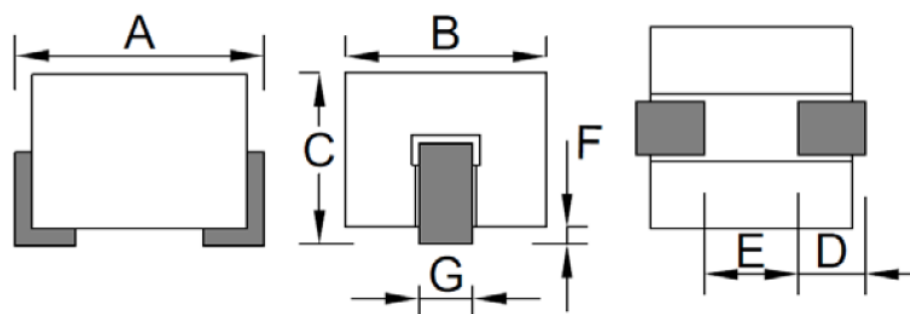




Why Used HCA Series



Dimension

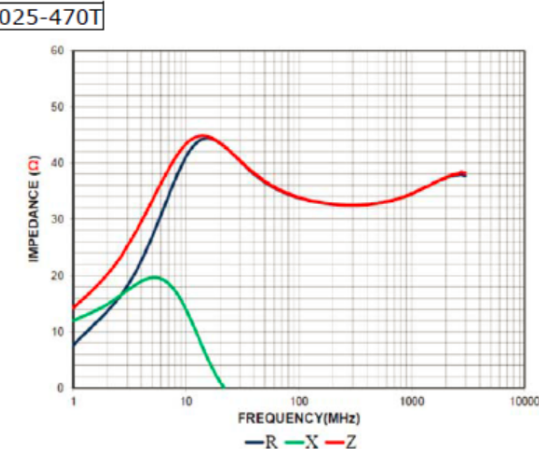
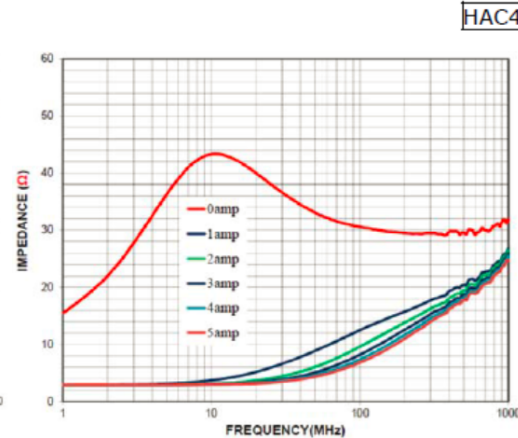
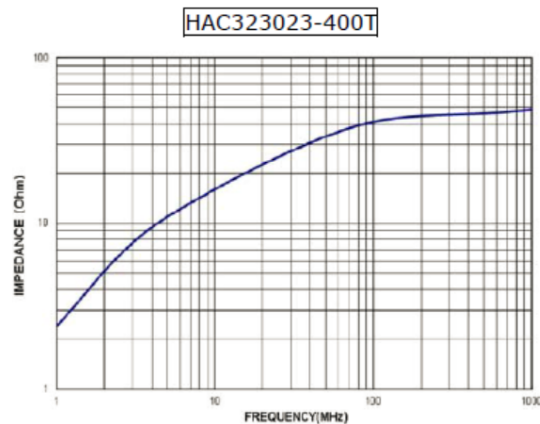
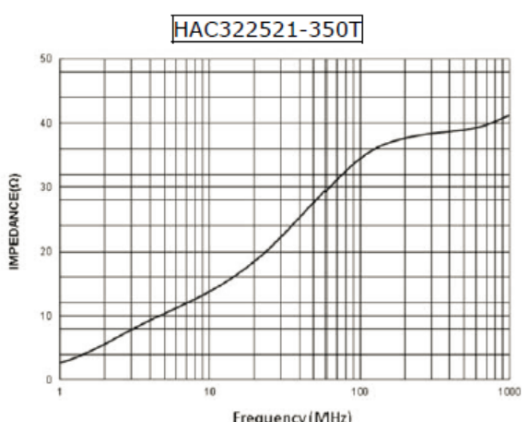


Type	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)
HCA322521	3.10 ±0.15	2.50 ±0.15	2.15 ±0.15	0.85 ±0.20	1.20 ±0.20	0.00 ~ 0.10	0.70 ±0.10
HCA323023	3.08+0.10/-0.15	2.9 ±0.10	2.20 ±0.10	0.8 ±0.20	1.2 Min.	0.00 ~ 0.11	0.85 ±0.10
HCA403025	4.30 ~ 5.10	3.1 ±0.15	2.70 ~ 3.1	1.35±0.20	1.35±0.15	-	-
HCA853025	9.0 ±0.40	3.0 ±0.15	2.8 ±0.25	1.50±0.50	1.25±0.20	-	-

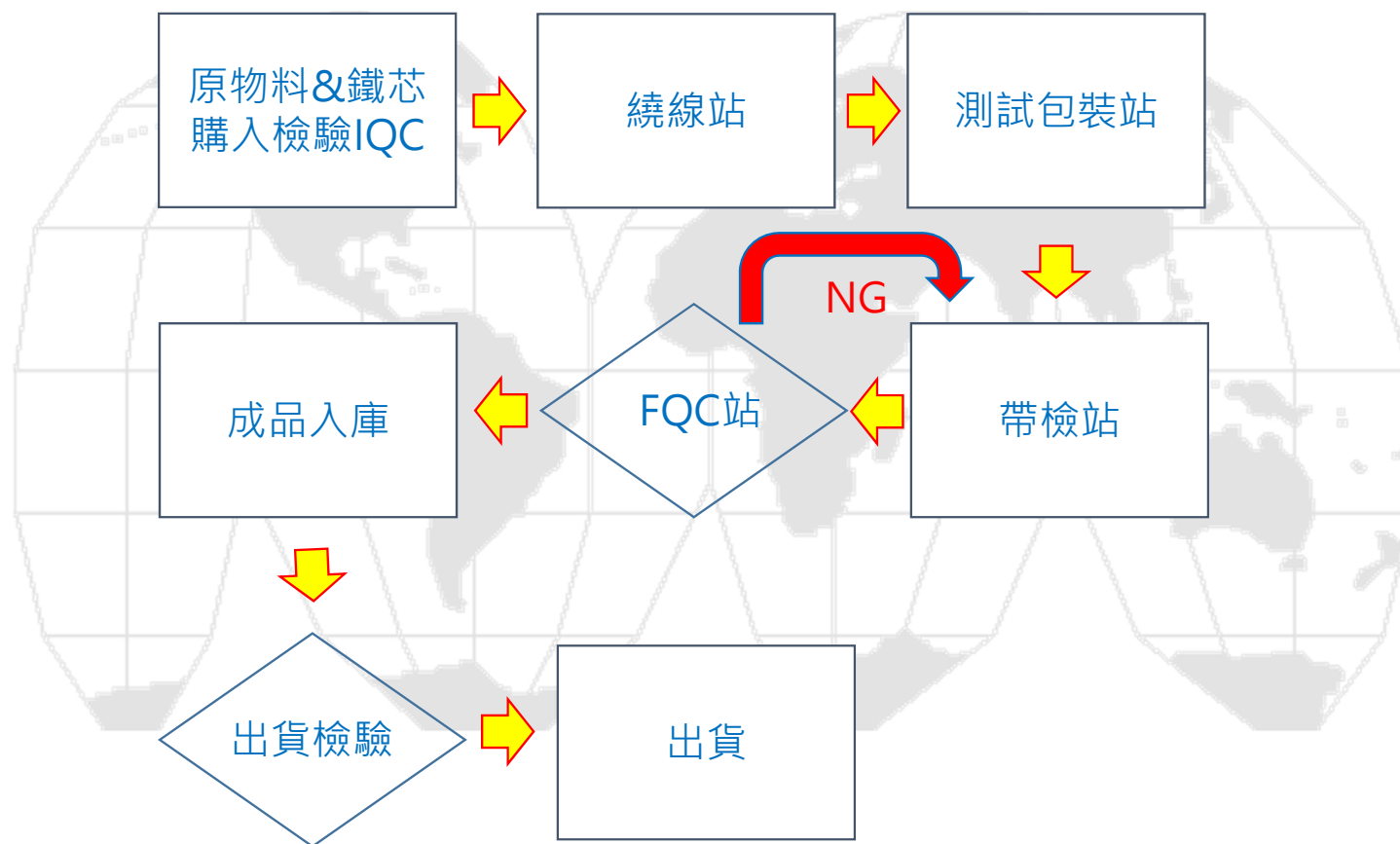


HCA Series Performance

Part Number	ELECTRICAL REQUIREMENTS 1			ELECTRICAL REQUIREMENTS 2		DCR (mΩ)Max	Rated Current(A) ΔT=40°C TYP. ΔT=60°C TYP.
	Impedance	Tolerance	Test Frequency	Impedance	Test Frequency		
	(Ω)	(%)	(MHz)	(Ω)	(MHz)		
HAC322521-350T	25	25	25	35	100	0.6	21
HAC323023-400T	23	25	25	40	100	0.6	21/26
HAC403025-470T	20	25	1	47	10	0.75	24/28
HAC403025-530T	35	25	25	53	100	0.6	35/45



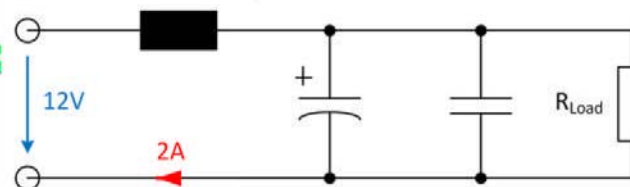
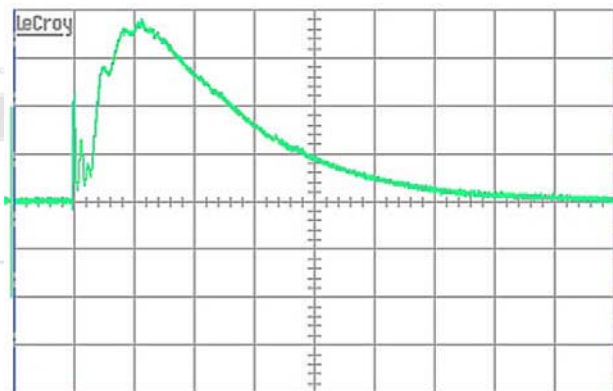
產品製程流程圖



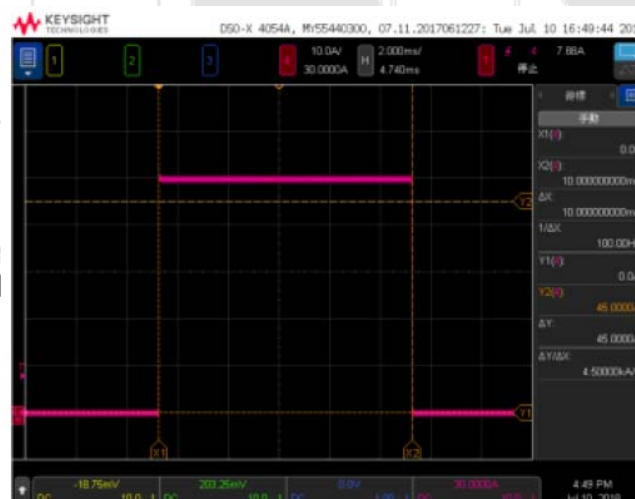
HCA Inrush Simulation

HCA403025W4-530T Inrush Current Testing

Real
Waveform



Simulation
Waveform

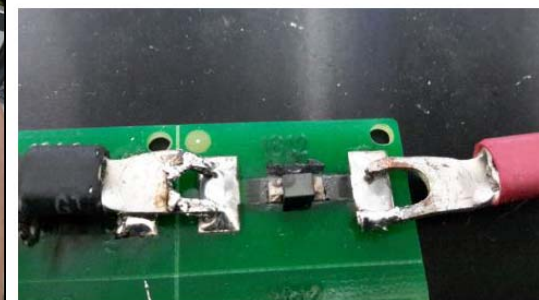
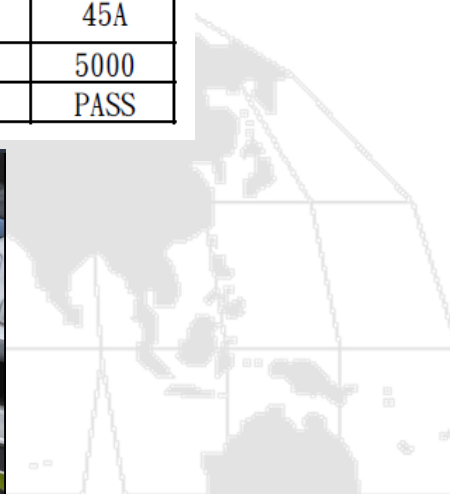
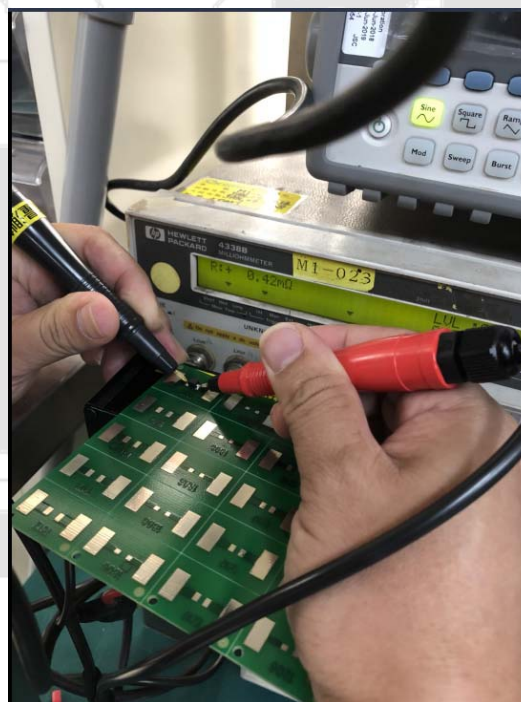


HCA Inrush Simulation result

HCA403025W4-530T Inrush Current Testing

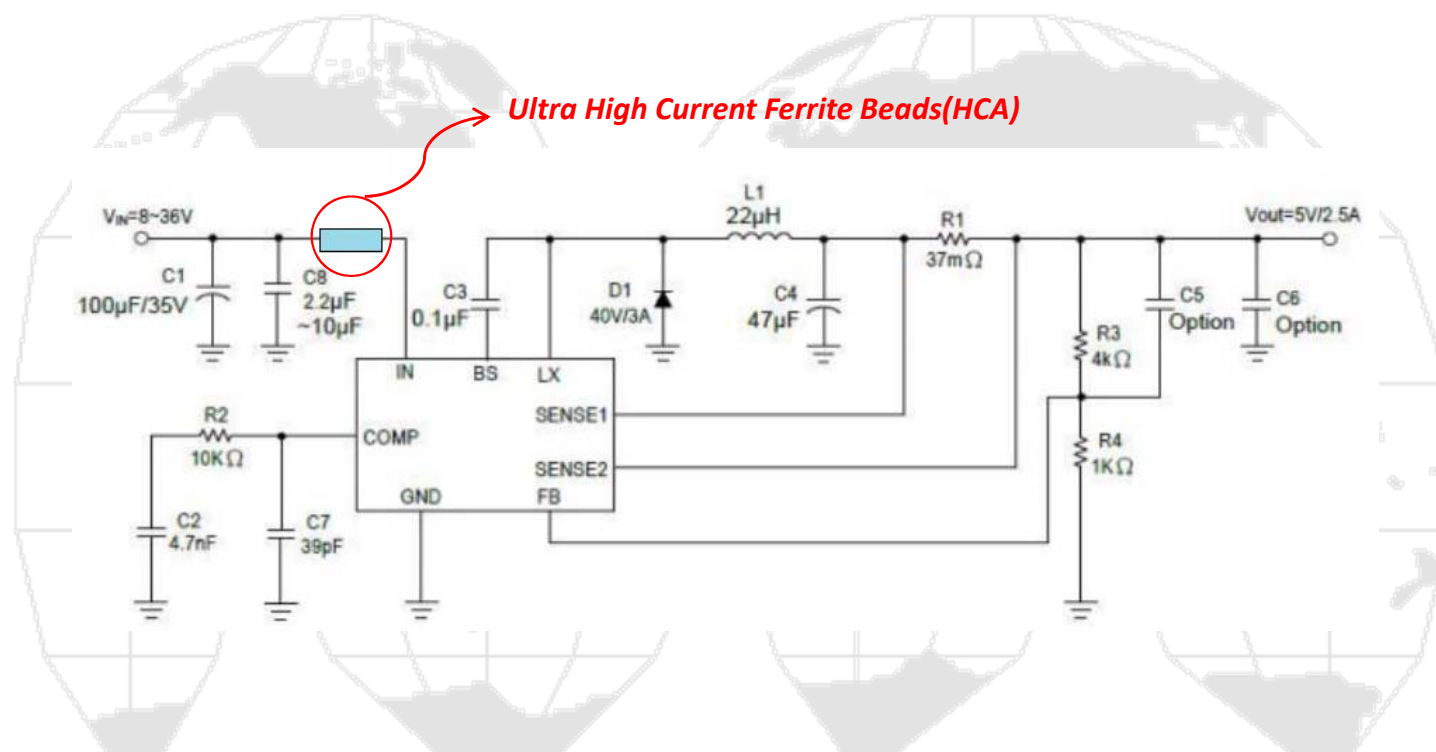
[Short time inrush test]

	Current	45A	45A	45A	45A	45A	45A
Time	(mS)	10	20	30	100	1000	5000
Situation	(Pass/fail)	PASS	PASS	PASS	PASS	PASS	PASS

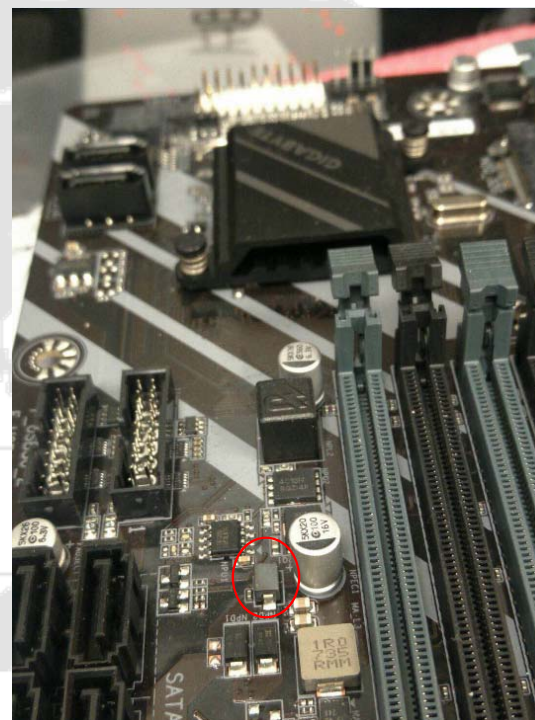
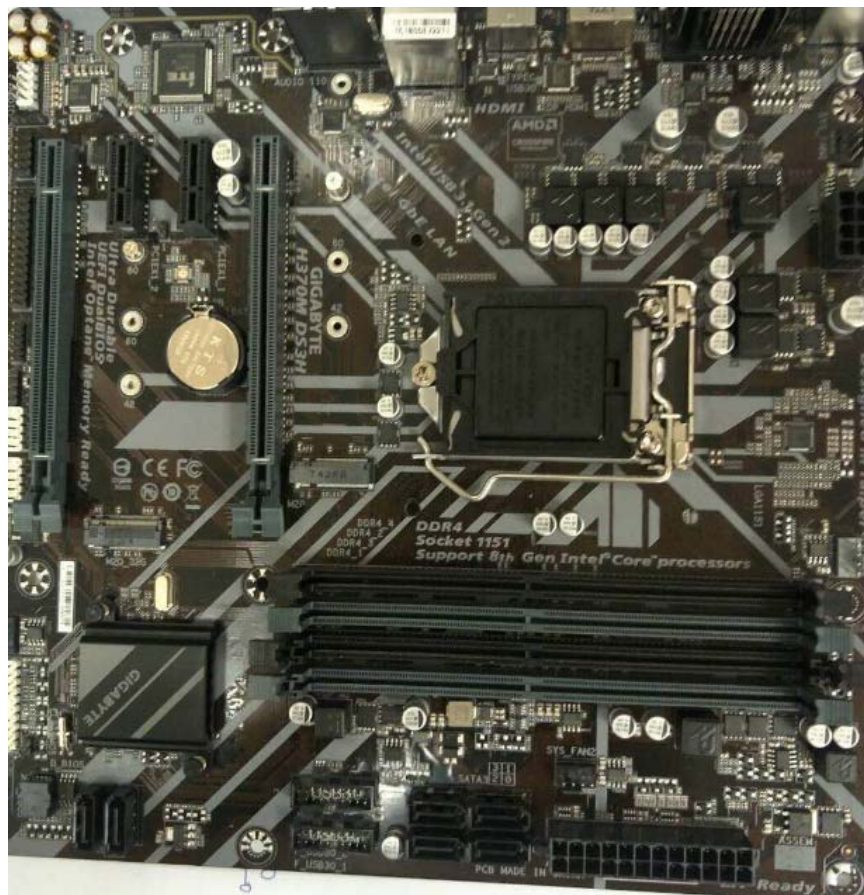


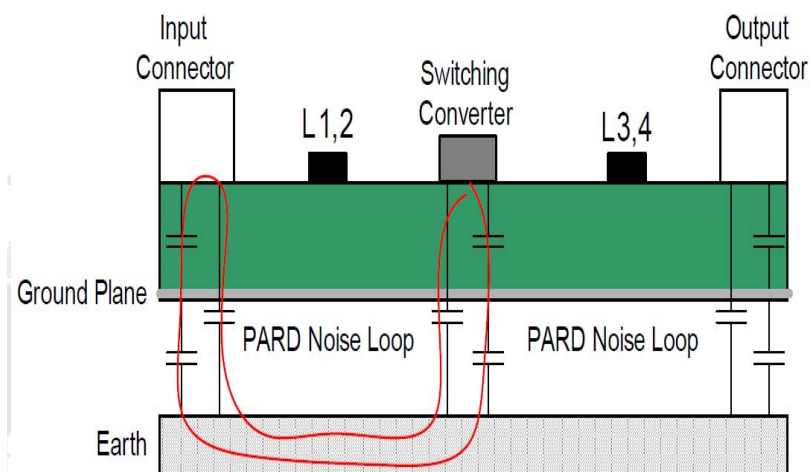
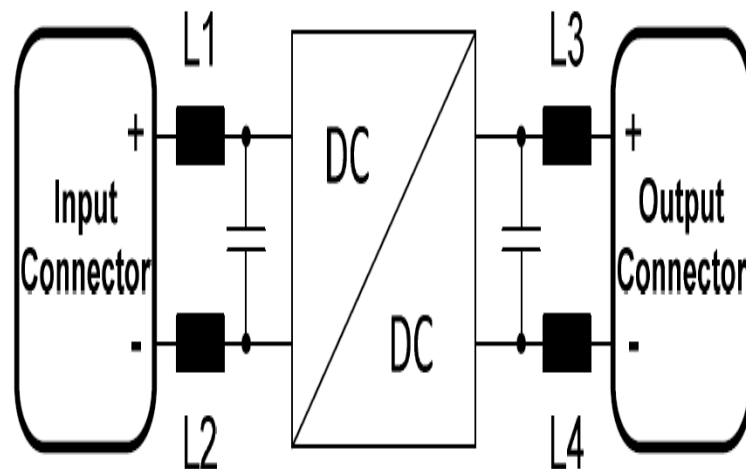
HCA Application As Input Choke

DC-DC Buck 產品應用示意圖



客戶實際應用範例

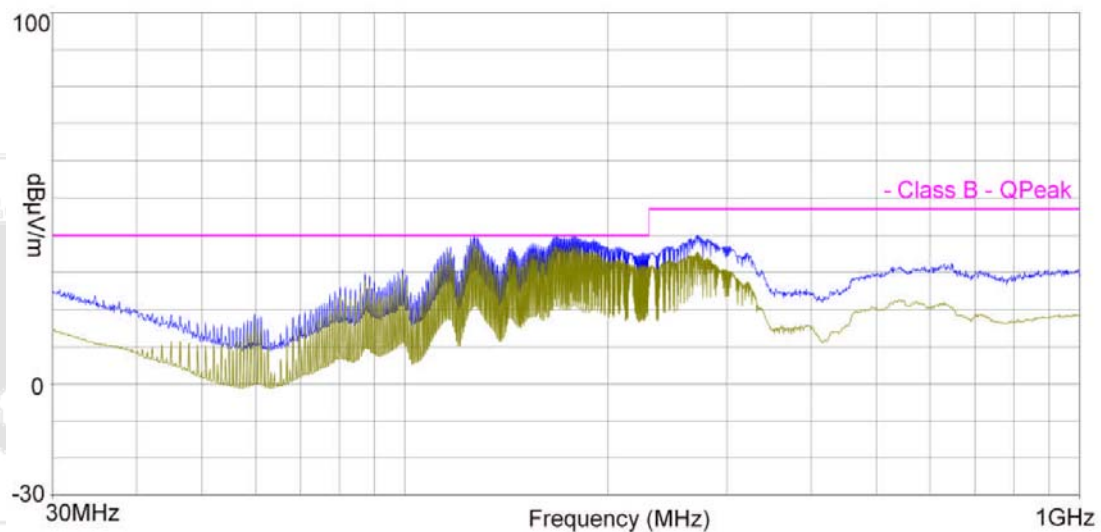




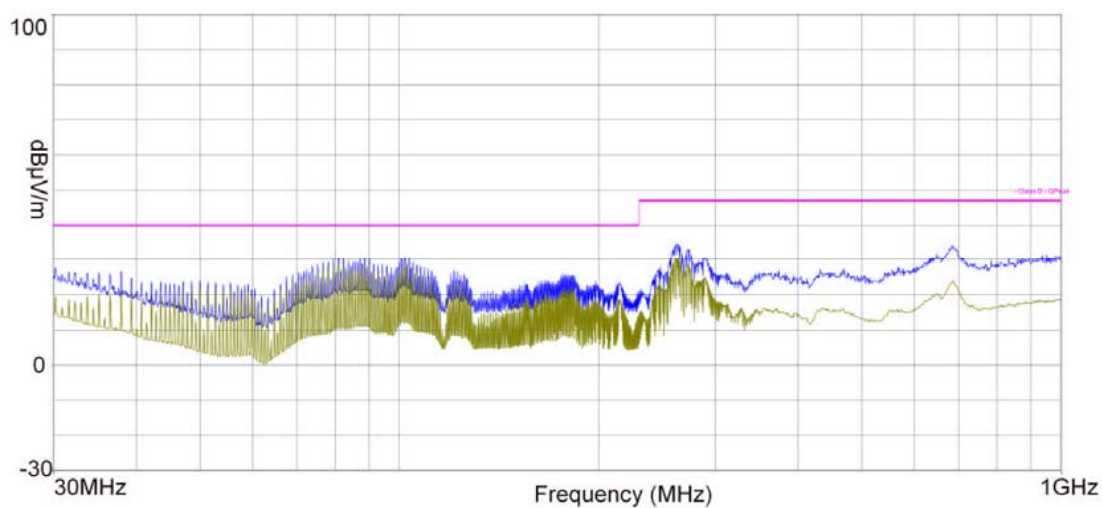
Again, in general ferrites should be placed as close as possible to the source of the noise because the noise couples into the unfiltered traces and cables. However, be aware that it is very likely that high frequency noise can couple around a ferrite via parasitic capacitance to GND and earth planes. Most EMC standards begin limiting radiated EMI at 30 MHz, so preventing this unwanted antenna effect of input and output leads is highly important. When a ground plane or a shielded enclosure is present, noise can couple around a ferrite placed towards the interior of a PCB

Input/Output Filter EMI effect example

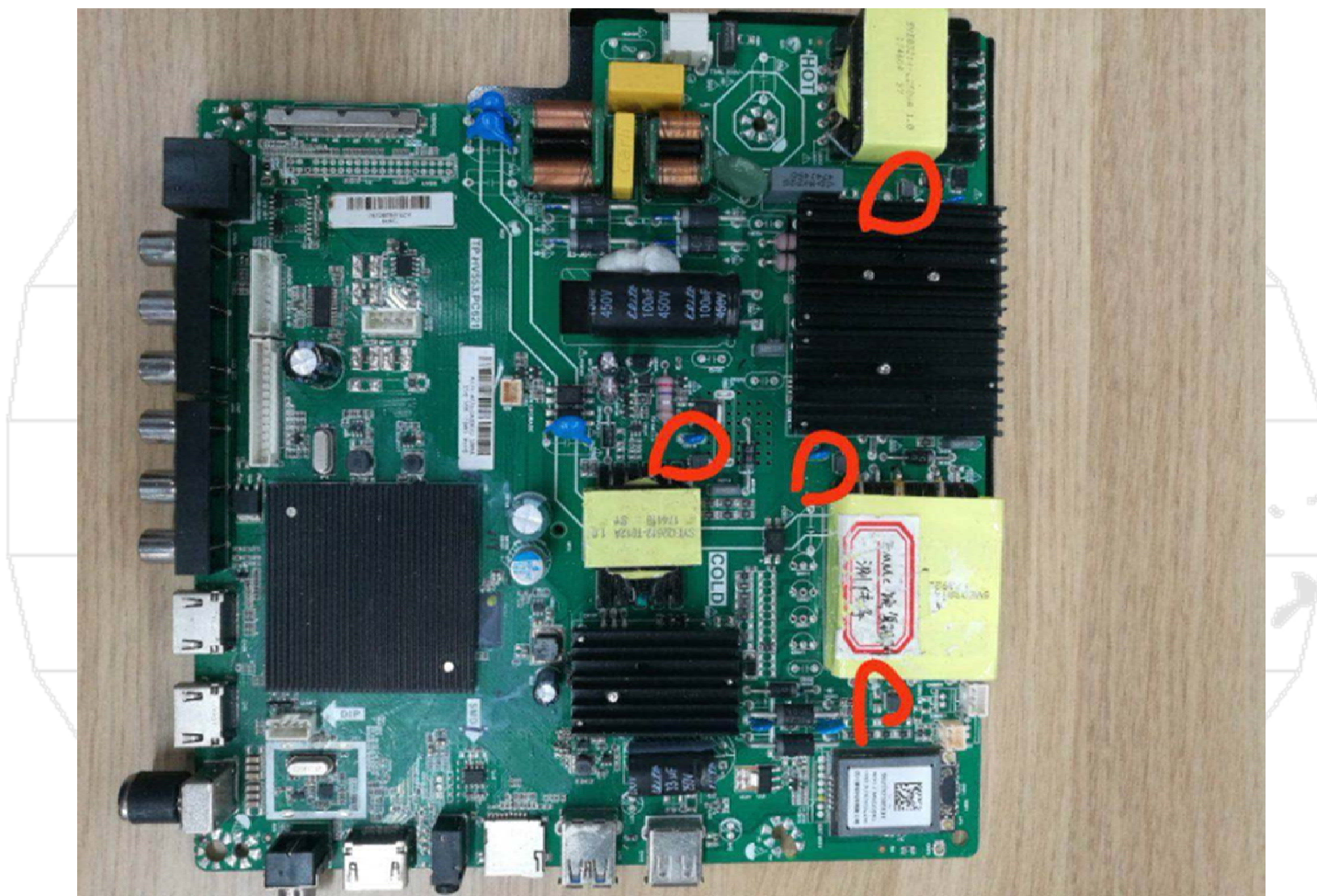
Without Filter



With Filter



客戶實際應用範例-TV主板





Thank you for your time!