



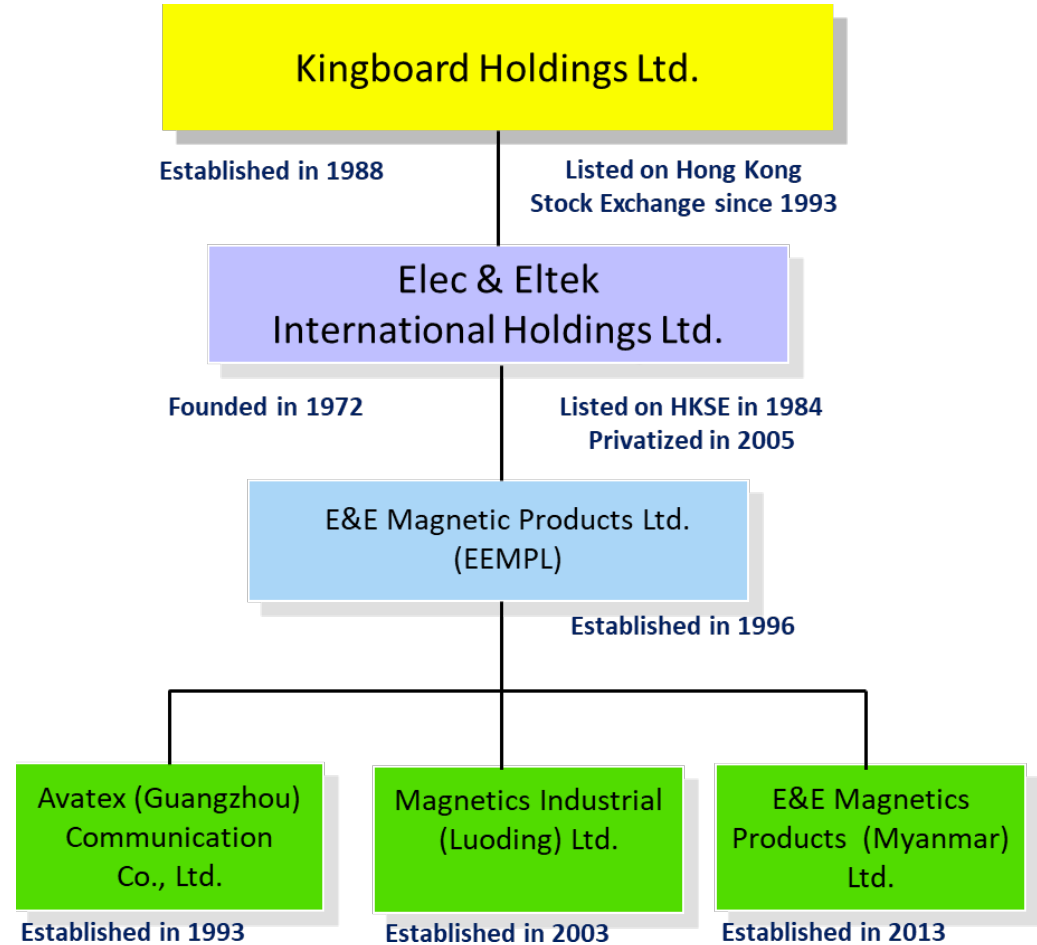
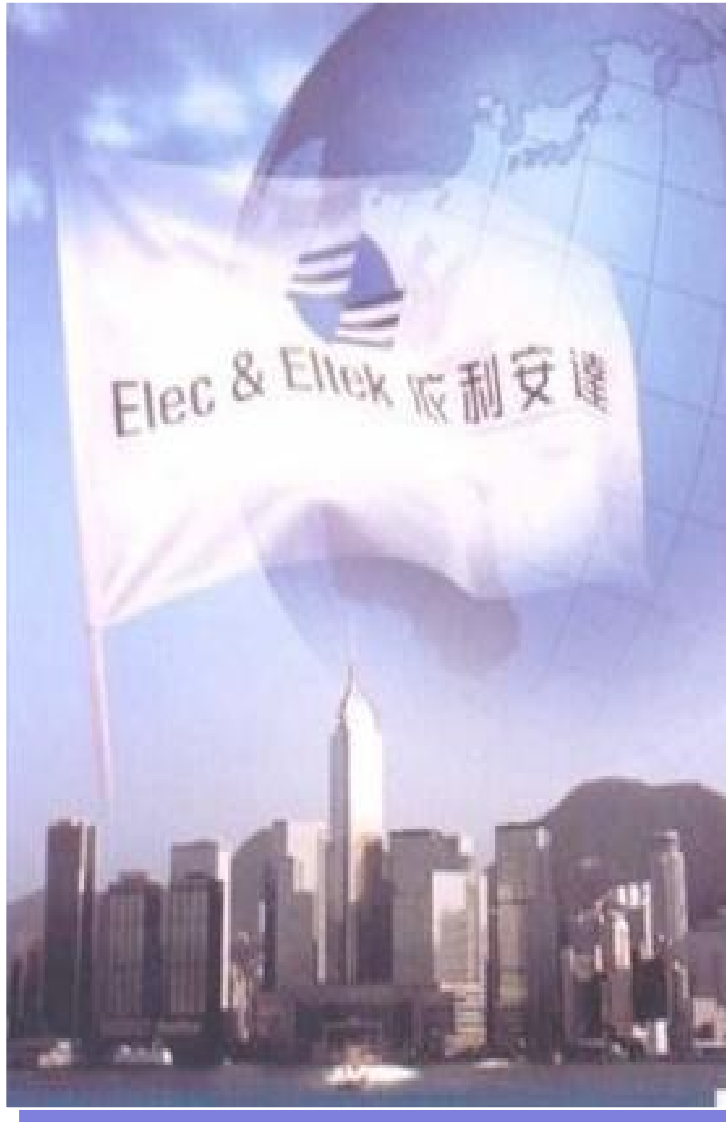
**Elec & Eltek 依利安達**

E&E Magnetic Products Limited

**COMPANY PROFILE  
OF  
E & E MAGNETIC PRODUCTS LIMITED**

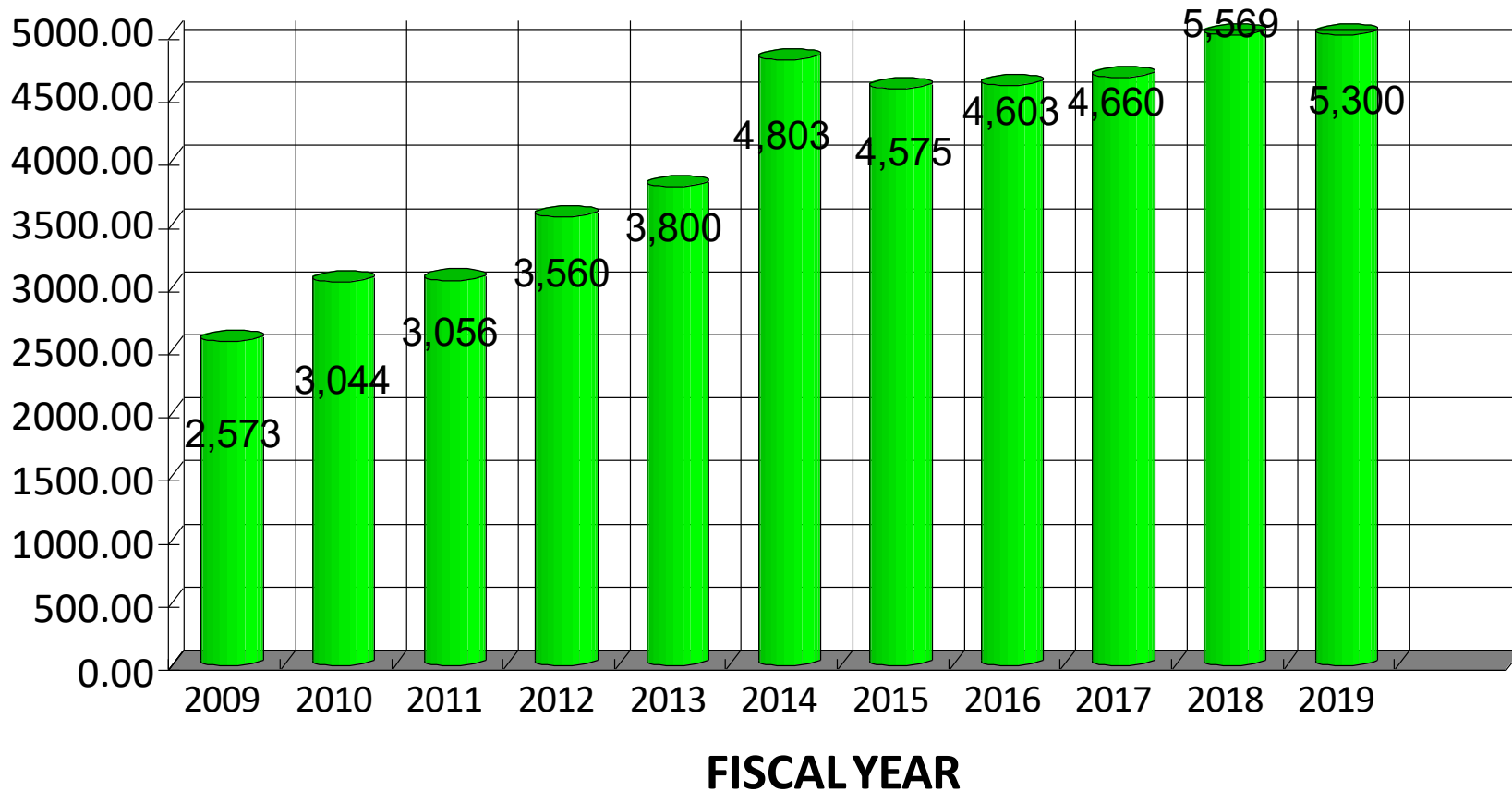
[www.eleceltek.com](http://www.eleceltek.com)

Date: June 2020



Kingboard Group has over 50,000 employees worldwide.

**Total Sales Turnover of Kingboard Holdings Ltd.  
(in US\$ million)**





eero

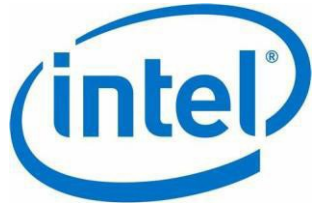
amazon



ERICSSON



SIEMENS



Google



KOSTAL



Garrett  
ADVANCING MOTION



PSA  
GROUPE



- Absopulse
- Adtran
- Allied Telesys Inc.
- Alcatel / Lucent
- Alaxala
- Ambit
- Anritsu
- Askey Computer
- ASUSTek Computer
- Atrica
- Avaya
- Aztech Systems / Azuno
- Bosch Group
- CalixNetworks
- Canon
- Cisco Systems
- Comtest Advanced Network
- Dasan Networks
- Digi
- Digitel
- D-Link
- Echostar
- EERO
- Energizer
- Ericsson
- First Int Computer (FIC)
- Fujitsu
- Gateway Computer
- H3C
- Hewlett Packard
- Hitachi
- Hon Hai
- Honeywell
- Integrated Devices Tech.
- IKOR
- Invensys / Lambda
- Juniper Networks
- Konica Minolta
- Kyocera
- Lexmark
- Methode Electronics
- Microsoft
- Mitac
- Mitsubishi
- Nakayo
- NCR
- NEC
- Netopia
- Nigata Seimitsu
- Nokia
- OKI
- Omron
- Oracle
- Panasonic
- Pepperl & Fuchs
- Philips
- Primax
- Quanta
- Sagem Telecom
- Samsung
- Siemens
- Sierra Wireless
- Silver Spring Networks
- Sony
- SynQor
- Tattung
- TechniSat Elektronik
- Toshiba
- Fuji Xerox
- Zebra (Motorola)
- Zoll Medical



- SPAL Automotive
- Meta Systems
- VAG
- Geely
- CEBI
- Wallbox
- Alpitronic
- Garrett
- Wireless Chargers
- BMW
- AUDI
- MERCEDES
- ALAC
- BURY
- CONTINENTAL
- VALEO
- PIEKER
- Delphi
- VAG
- PSA
- Harman

Customers, who have also purchase Magnetic Integrated Connector(MIC), are highlighted in Blue and Green for Automotive



- Ambit
- Askey
- Asustek
- Benchmark
- Celestica
- Compal
- Computime
- Fabrinet
- Flextronics / Solectron
- Foxconn / Hon Hai
- Inventec
- Jabil
- Kaga
- Microlink
- SCI / Sanmina
- SIIX
- Quanta
- Venture
- World Fair Electronics Technology Ltd

Silicon Valley



North Carolina



United Kingdom



LuoDing



Guangzhou



Hong Kong



Myanmar





## Products by Applications for 7 Major Areas



### Networking Discretes

### Magnetic Integrated Connectors

### Telecom Discretes

### Broadband Access

### Power Magnetics

### Electronic Modules

### Wireless Coil Module

- Transformers for Filters for 10, 100, 1000, 10GBase-T applications
- Transformers for PoE/PoE+ applications
- Transformers for Automotive meeting AECQ200, 1000Base-T, Ext Temp ranges, +125°C and +155°C

- Magnetics integrated RJ-45 connectors for 10/100/1000Base-T applications
- Magnetics integrated RJ-45 connectors for PoE/PoE+ applications
- Magnetics integrated combo connectors for LAN and USB

- Transformers for Sonet/SDH(STM-1/E4/CMI) applications
- Transformers for T3/DS3/E3/STS-1 applications
- Transformers for T1/E1/CEPT/ISDN-Pri applications
- Transformer for ISDN-U-Interface or S-Interface applications
- Multi-layers and Wire Wound Chip Inductors and CMCs
- Multi-layers EMI Bead Inductors

- Filter, Splitter, Transformer, or Common Mode Choke for xDSL applications
- Transformer or coupler for HomePlug
- Transformer, Splitter, or Filter for HFC or cable modem applications.
- Multi-layers and Wire Wound Chip Inductors and CMCs
- Multi-layers EMI Bead Inductors

- Miniature SMT Power inductor for desktop, notebook, or handheld device.
- High current (upto 125A) power inductor for low voltage DC/DC conversion
- Power magnetics for Current Sense applications
- Power magnetics for SMPS applications
- Automotive grade power inductors and transformers to meet ISO16949 and AECQ200 requirements
- Chip type CMCs for power line noise filtering

- AFE module for ADSL or VDSL applications
- Line Protection Module for Telecom applications
- Transceiver module for LAN applications
- POTS filters for xDSL applications
- POTS or ISDN splitter for xDSL applications
- Power modules/converters (e.g. OBS) for customized applications

- Customize shape is available
- High efficiency & suitable for Wireless power transmission
- Designed for various Portable Electronic Device application
- Small and thin Coil module meet WPC standard
- Various operating temperature & frequency range available

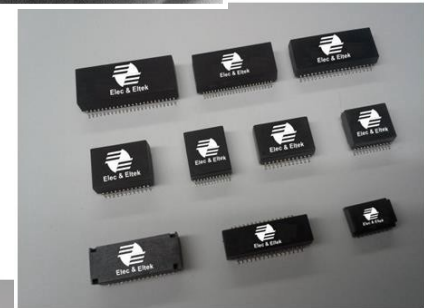
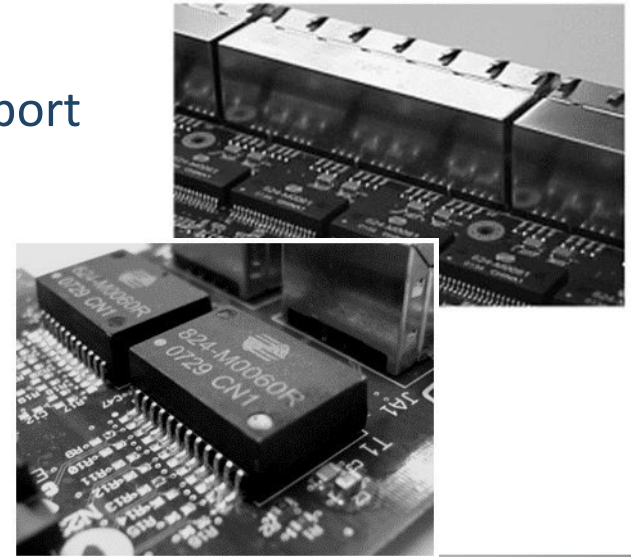


Products for Automotive



## Ethernet Network (IEEE802.3)

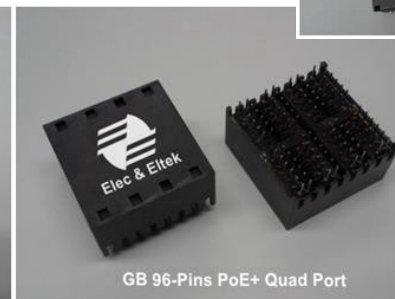
- Support Integrated Transformer Modules with multiport channels in various packages
- Support full range applications for twisted-pair transmission medium
  - 10/100Base-T
  - 1G/2.5G/5G/10GBase-T
- Power over Ethernet (PoE)
  - Support up to 350mA balanced DC line current
- Power over Ethernet Plus (PoE Plus)
  - Support up to 1,000mA balanced DC line current
- Extended temperature range up to +155 °C available for non-PoE and PoE products.



GB 48-Pins PoE+ Dual Port



10GB 24-Pins Single Port



GB 96-Pins PoE+ Quad Port

## Unique ‘One-Side’ and ‘Clip-n-Lock’ Architecture to fit with single and multi-ports for different applications:

- 10/100/1G/2.5GBase-T, per IEEE 802.3
- 5G/10G, per IEEE 802.3an
- PoE, per IEEE 802.3af
- PoE Plus, per IEEE P802.3at
- Standard and extended temperature ranges
- Third Party Certified
  - Mech.: TIA/EIA-568-B, Cat 6
  - Elec.: UL1863; CAN/CSA-C22.2 No.182-4-M90.1990
- EMC: FCC Part 68, sub-part F; FCC (CFR47) Part 15 Class B, EN55022 Class B and CISPR 22 Class B for Gigabit Working Environment

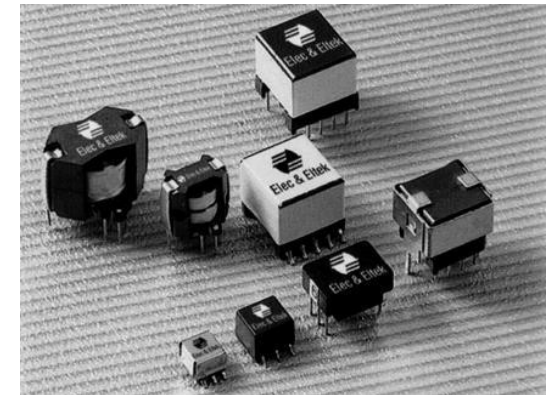
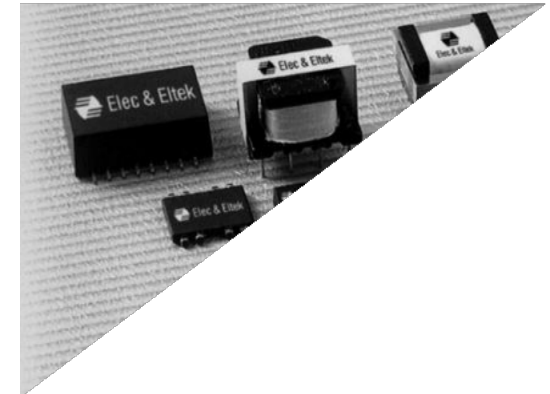
## Customized Designs:

- Various packages including 1x1 - 1x8, 2x1 - 2x8, and combo(RJ-45+USB ports)
- Various panel orientation (right angle, vertical) and footprint types
- Integration with protection device or diode bridge to meet specific transient requirements



## Transformers, Common Mode Chokes and Coupled Inductors

- Provide the isolation, impedance matching and EMI suppression in the following applications
  - Analog Telephone Network:
    - Transformer for both Soft Modem and Traditional Analog Modem applications
  - Digital Telephone Network:
    - Transformer and CMC for T1/E1/J1, T3/E3/DS3/STS-1, E4/STM-1, ISDN Pri-Interface, S-Interface, U-Interface applications
  - Digital Subscriber Loop (DSL):
    - Transformer, CMC, Coupled Inductor for VDSL/VDSL2, ADSL/ADSL2/ADSL2+, HDSL/HDSL2/HDSL4/SDSL/G.SHDSL applications
  - Cable Modem / Cable TV:
    - RF Transformer, Transmission Line Transformer, Mixer, Splitter for Cable Modem, TV set-top box applications
- Extended temperature range available

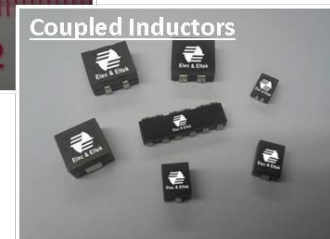
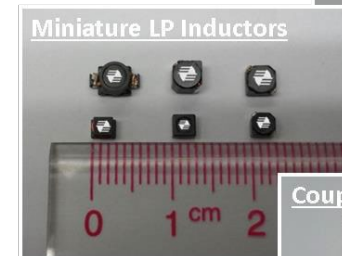


## Products: Transformers, CMCs, and Inductors

- Utilize low loss materials and unique winding approach provide high power density low loss parts for the applications include high-speed servers and workstations, telecom switching networks, routers and base station equipment.
- The miniature low profile and shielded construction inductors provide the features today's tablets, notebooks and portable devices the energy storage and input-output filters demands.
- The A-Grade series provide high reliability for Industrials and Automotives applications

## Applications:

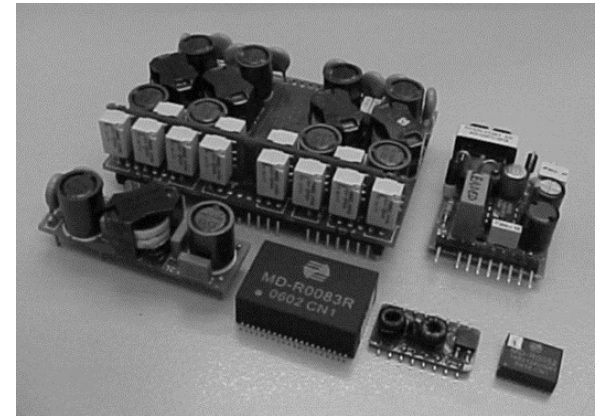
- AC-to-DC Switching Mode Power Supply (SMPS)
- DC-to-DC converters in Distributed Power Architectures (DPA)
- Point of Load (POL) Systems
- Coupled Inductors for High Current Voltage Regulator Module/ Drop (VRM / VRD)
- SEPIC and Buck Boost types inductors for High Bright LED Lightings
- Digital Amplifiers for Automotive's Audio System





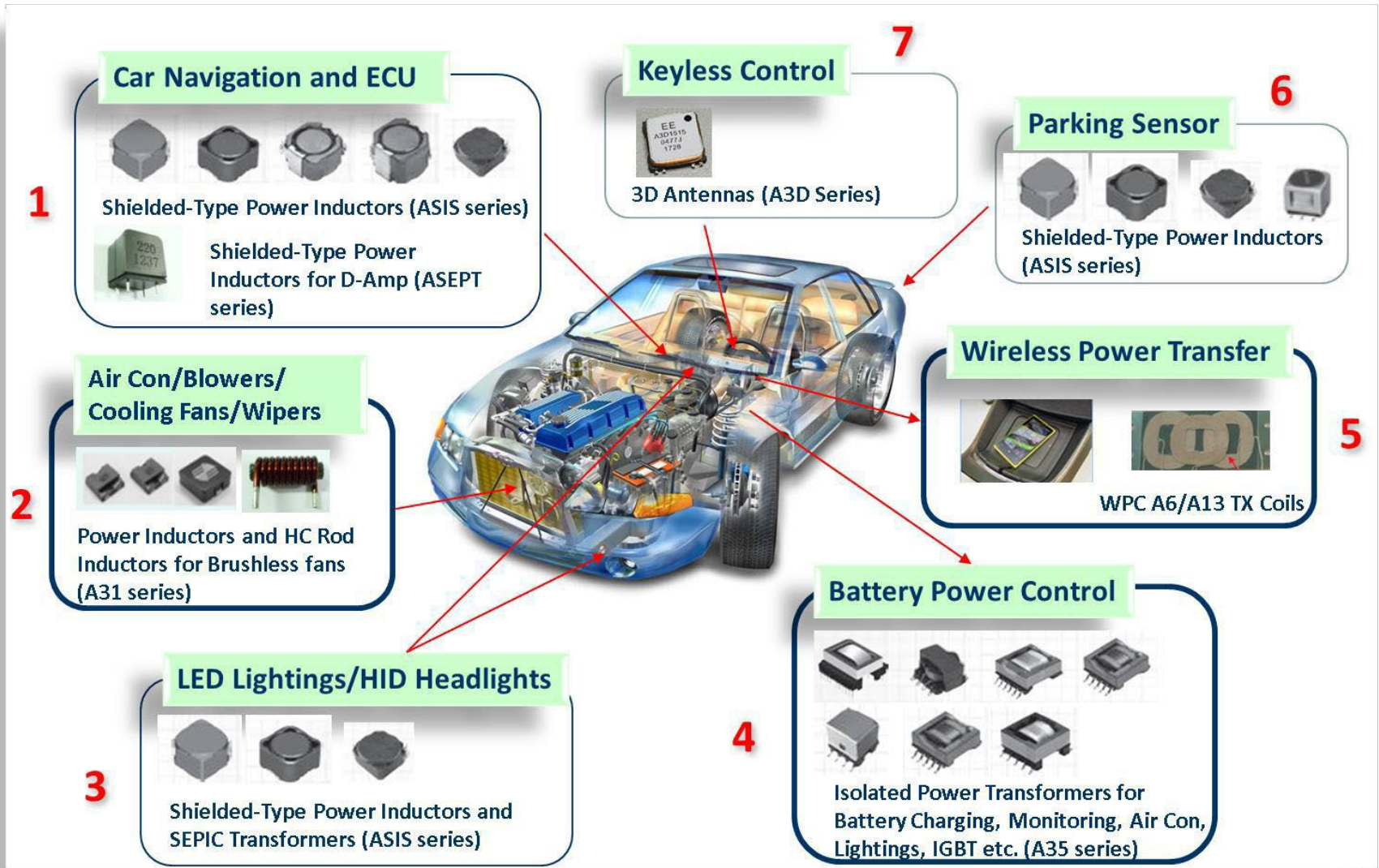
## Telecom / Broadband Access Applications:

- Multi-Port xDSL AFE Module
- Single Port xDSL CO / CPESplitter
- Multiple Port xDSL CO / CPE Splitter with integrated relay control
- Coupled Inductor with integrated OC/OVprotection devices.
- Multi-port T1/E1 Module with integrated protection devices (chip side, line side or both)
- Multi-port ISDN S-Interface Module with integrated protection devices
- Multi-port Relay Driver Module



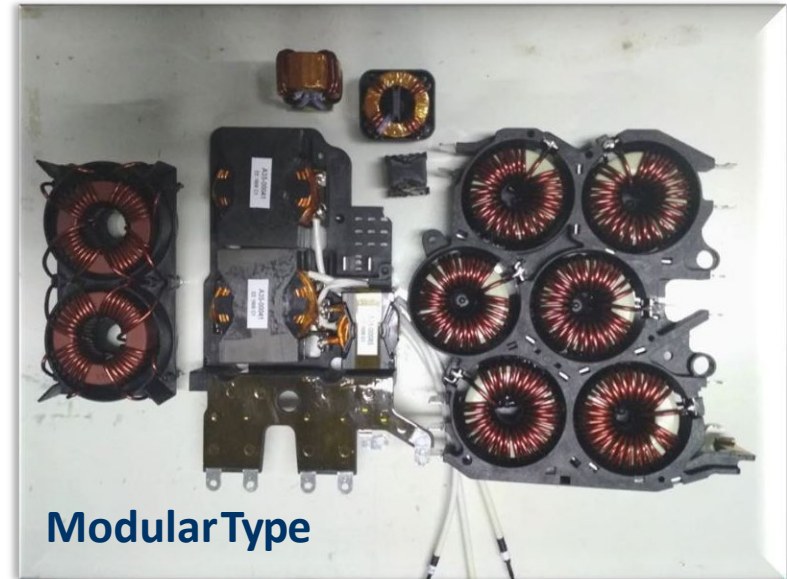
## Power Applications:

- Customized DC-DC/AC Converter for industrial applications
- Customized Power modules for customer specific applications
- Customized modules with cable assemblies (eg. SPP+ and QSFP Connectors)

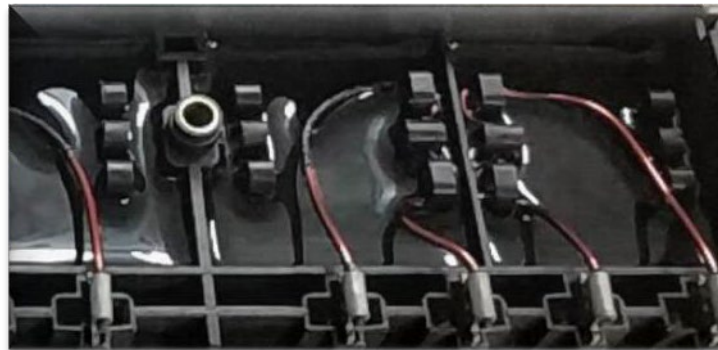




**Standalone Type**



**Modular Type**



**Potted (Thermal Compound) Type**



- Member of WPC – (Since 2009)
- WPC sets international standard for compatible wireless charging
- Over 600 members in WPC
- E&E Transmitter Module (Tx) and Receiving coil (Rx) meet WPC standard
- E&E has full range of Transmitter (Tx) and Receiving (Rx)

Qi标准  
Qi certification

**高标准:**  
基于Qi国际标准, 通过国家3C认证,  
质量保证。

**兼容性:**  
支持符合无线充电Qi标准的产品。

**节能环保:**  
超低功耗, 高效率充电, 低辐射。



- Member of A4WP – (Since 2012) / Member of PMA – (Since 2013)
- Member of AirFuel Alliance – (Since 2015)





## EEMPL Products (Transmitter module TX and Receiving module RX)

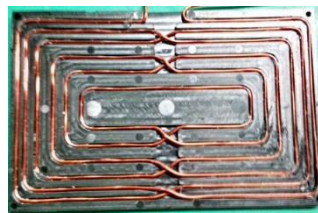
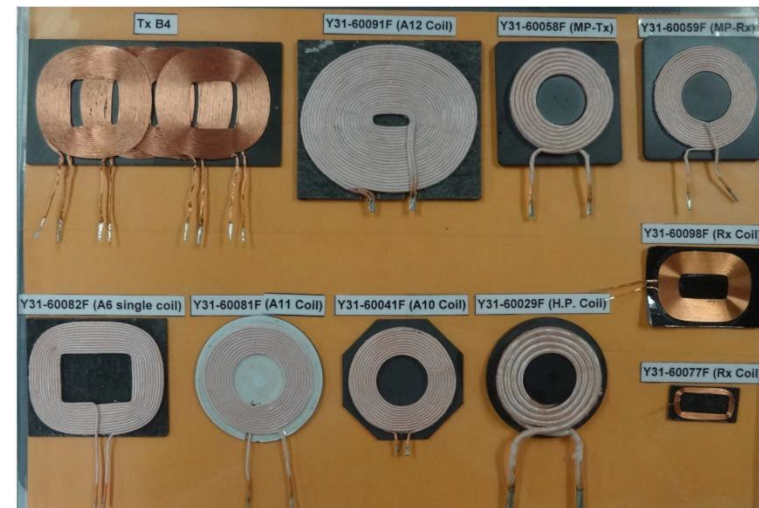
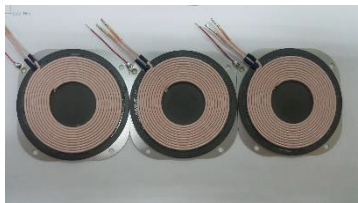
Coil, Ferrite plate/sheet, Insulating layer, coil modules, PCB modules, insulated copper wires, etc

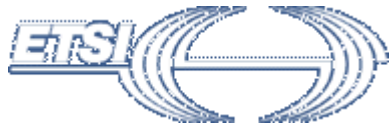
### Configurations:

Tx: A1,A5,A6,A7,A8,A9,A10,A11,A11a,A12,A13,A16,A17,A19,A20,A22,A23,A24,A25,A26,A27,  
A28,A28a,A29,A30,A31,A34,A35,A36, B1,B2,B3,B4,B5,B6,B7

Rx: A, B, C, D, E, TPR#2, TPR#5, TPR#6

Medium Power: TPR#MP1A/B/C,MP3,MP-A1,2,3,4,5,6,7,8,9,10,11,13,18,19,21,MP-B1, RX





- All products are well designed to meet or exceed the applicable standards set by the organizations such as IEEE, ANSI, ETSI, ITU etc.
- The mechanical configurations are designed to meet the applicable standards set by IEC, EIA, TIA, JEDEC etc.
- For safety critical products, they are designed to meet the requirement set by safety agencies such as UL, CSA, BABT, Nemko, Finko, Demko, Semko etc.
- Corporate Membership in DSL Forum, VDSLAlliance.



INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) COMMISSION ELECTROTECHNIQUE INTERNATIONALE (CIE)

NO 8948

INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) COMMISSION ELECTROTECHNIQUE INTERNATIONALE (CIE)

NO 8947

INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) COMMISSION ELECTROTECHNIQUE INTERNATIONALE (CIE)

NO 8946

INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) COMMISSION ELECTROTECHNIQUE INTERNATIONALE (CIE)

NO 8945

IEC SYSTEM FOR CONFORMITY TESTING TO STANDARDS FOR SAFETY OF ELECTRICAL EQUIPMENT (IECSC) SYSTEME CEI EN SANTE DE CONFORMITE A X NORMES DE SECURITE DE L'EQUIPEMENT ELECTRIQUE (IECES) METHODE OC

**CB TEST CERTIFICATE**  
**CERTIFICATE D'ESSAI OC**

Product: Transformer certified for supplementary insulation

Name and address of the applicant: E & E Magnetic Products Limited, Unit B19, 3/F, Manit Ind., Centre, 34 Toloowan Road, Kowloon, HONG KONG

Name and address of the manufacturer: E & E Magnetic Products Limited, Unit B19, 3/F, Manit Ind., Centre, 34 Toloowan Road, Kowloon, HONG KONG

Name and address of the factory: E & E Magnetic Products Limited, 4-5/F, Block 4th Science & Tech. Park, Gietoo, Guangzhou, P.R.C.

IEC 60900 2nd Edition, 1991 + Amend. 1, 1992 + Amend. 2, 1993 + Amend. 3, 1995 + Amend. 4, 1996.

300015237

**Nemko**

P.O. BOX 76, SILBERHAVN 8450 AARSKOV, DENMARK

06 April 2009

Signature: *Laszlo Pall*  
Principal Engineer

**CERTIFICATE**

DEMKO CERTIFICATE

Certificate No. 20030401

Underwriters Laboratories Inc.

**CERTIFICATE**

Avatex (Guangzhou) Communication Company Limited  
(One of E&E Magnetic Products Limited Subsidiary Company)

No. 4, Hongming Road, Eastern Section of Guangzhou Economic & Technological Development District, Guangzhou, 510760, P.R. China

has implemented and maintains a **Quality Management System**.

Scope: The design and manufacture of inductors.

ISO/TS 16949 : 2009  
(with product design)

Certification decision: 2013-10-07  
This certificate is valid until: 2016-10-06  
Certificate Registration No.: 20000860 T509  
IATF No.: 0172776  
Buffalo Grove, IL, USA: 2013-10-07

**UL DQS Inc.**

Signature: *Janet Han*  
Managing Director

IATF Contract Office: DQS GmbH, August-Schanz-Strasse 21, 60433 Frankfurt am Main, Germany  
Heating Office: UL DQS Inc., 1130 West Lake Cook Road, Suite 340, Buffalo Grove, IL 60089 USA  
Responsible Office: DQS-UL AP, OOO, Plaza, Room 1702, No. 941, 200040 Shanghai, P.R. China

Item	Application	Equipment	Manufacturer	Model	Parameters
1	LAN/Telecom	RF Network Analyzer	AGILENT	8751A	5Hz- 500MHz
2	LAN/Telecom	RF Network Analyzer	AGILENT	8753ES	
3	LAN/Telecom	ENA Series Network Analyzer	AGILENT	E5071B	300KHz- 8.5GHz
4	LAN/Telecom	Harmonic Distortion and Noise Analyzer	Audio precision	2222	
5	LAN/Telecom/ Power	RF Impedance and material Analyzer	AGILENT	4291B	1MHz- 1.8GHz
6	LAN/Telecom/ Power	Precision DC Power Source	AGILENT	E3634	0-25V, 7A/0-50V, 4A
7	LAN/Telecom/ Power	Digital Power Analyzer	Chroma	2100	
8	LAN/Telecom/ Power	Programmable LCR Meter	Fluke	PM6306	
9	LAN/Telecom/ Power	Precision Low Ohm Tester	HIOKI	3220	
10	LAN/Telecom/ Power	Precision LCR Meter	AGILENT	4284A	20Hz- 1MHz
11	Power	Precision LCR Meter	Wayne Kerr	W K 3260B	100A DC Bias
12	Power	Automatic Transformer Test System	Tong Hui	TH2819XB	
13	Power	Programmable Resistive Type Temperature Rise System	AGILENT	E3633A	
14	Power	Power Inductance Measurement System	ed-k	DPG 10-1000B	1000A
15	Mechanical	Digital Profile Projector	Mitutoyo	PJ-A3000	
16	Mechanical	2.5 D Optical Measurement System	Seven Sea	IA-4030	Accuracy: XY<=3 um ( LuoDing)
17	Prototype	FFF Type 3D Printer	Ultimaker	Ultimaker 2	Material: PLA, ABS, CPE, CPE+, PC, Nylon, TPU 95A Resolution: Layer Thickness <20 um Size: 223 x 223 x 205mm
Item	Application	Software	Manufacturer	Version	Features
1	2D Drafting	Auto CAD LT	Autodesk	Standard	Network Version
2	3D Design	Solidwork	Solidwork	Premium	Network Version
3	3D Design	ProE	PTC	Premium	3D Design
4	Molding Tool Design	iMold	Manusoft		Luo Ding
5	3D Simulation	Solidwork Simulation	Solidwork	Premium	Drop Test, Vibration, Thermal, Mechanical Stress, Motion Analysis
6	Transformers & Inductors Design	Magnetic Designer	Kg Magnetics	V4.0	Buck/Forward/Flyback/Air Coil/Mag. Amp/Inductors
7	Electromagnetic Field Simulation & Design	Infolytica Magnet	Siemens	Standard	2D & 3D Electromagnetic Field FEA Simulation
8	PCB Layout	Protel PCB	Protel	Standard	
9	Project Management	Microsoft Project	Microsoft	2013	
10	Product Specification	Corel DrawDesigner	Corel	Professional	
11	Product Specification	Adobe Acrobat	Adobe	Professional	

Item	Purposes	Equipment	Manufacturer	Model	Parameters
1	RoHS Materials	X-Ray Analytical Moriscope	Horuba	XGT-100WR	
2	Product	Programmable Hi/Lo Temp. Chamber	Espec	MC-710P	-70°C to +150°C
3	Product	Temp. Shock Chamber	Espec	TSA-71L-A	-77°C to +205°C
4	Product	Programmable High Temperature Oven	Espec	S332-4KW	200°C
5	Cores	High Temperature High Pressure Chamber	Gongwen Equipment	SHA-240	Temp. Range: 10°C to 135°C Humidity Range: 100% RH Pressure Range: 0 - 2.5kg/mm2
6	Product	Temperature/Humidity Chamber	Gongwen Equipment	GDS-150	Temp. Range: 0°C to 150°C Humidity Range: 20 to 98% RH
7	Product	High Temperature Oven		YA-300	Temp. Range: Room Temp to 300°C
8	Product	Solderability Tester		SD-4CR	Temperature: 400°C
9	Product	Electrodynamic Vibration Test System	Dongling Tech	ES-3-150	Frequency Range: 5 - 4000Hz Amplitude Range: 2.5mm Max
10	Product/Metal Parts	Salt Spray Tester	Gongwen Equipment	DR-60	JIS;ISO3768/3769/3770; ASTM/B117/B268
11	Product	Cross Section Analysis			
12	Product	x1000 Microscope			
13	SMD IR Reflow Simulation	Hot Air Reflow Simulator (for Pb products)	Navanakorn	HA-7CR	Temp. Range: Room Temp to 280°C Deferent Speed: 0.35-1.2m/minutes
14	SMD IR Reflow Simulation	Hot Air Reflow Simulator (for Pb-free and RoHS products)	Sun East	NT-8A-V2	Temp. Range: Room Temp to 300°C Deferent Speed: 0.35-1.5m/minutes
15	T&R	Programmable Peel Force Test	NTE	JE PET-500	Weight Range: 0 to 500g Angle Range: 165 - 180 Deg.
16	Connectors	Push/Pull Tester			
17	Connectors	Durability Tester			
18	Connectors	RJ45 Loading Rotation (Gorilla) Tester			

Item	Description	Test Method & Condition	Reference Document
1	High Temperature Exposure (Storage)	1000 hrs at rated operating temperature (i.e. 130°C), unpowered	MIL-STD-202 Method 108
2	Temperature Cycling	1000 cycles (-40°C to +125°C)	JESD22 Method A104
3	Moisture Resistance	T=24 hours/cycle. Note: Steps 7a & 7b not required, unpowered.	MIL-STD-202 Method 106
4	Biased Humidity	1000 hours 85°C/85%RH, unpowered	MIL-STD-202 Method 103
5	Operational Life	1000 hrs. @ 125°C	MIL-PRF-27
6	External Visual	Inspect device construction, marking and workmanship, under 10X microscope	E&E Workmanship Standard & MIL-STD-883, method 2009
7	Physical Dimension	Verify physical dimensions to E&E specification	JESD22 Method B-100, E&E specification
8	Terminal Strength (Leaded Type Device Only)	Test leaded device lead integrity only. Conditions: A(910g), C(1.13kg), E(1.45kg-mm)	MIL-STD-202 Method 211
9	Resistance to Solvents	Add Aqueous wash chemical. OKEM Clean or equivalent. Do not use banned solvents.	MIL-STD-202 Method 215
10	Mechanical Shock	Figure 1 of Method 213. Condition C.	MIL-STD-202 Method 213
11	Vibration	5g's for 20 minutes, 12 cycles each of 3 orientations. Note: Use 8"x5" PCB, .031" thick, 7 secure points on one long side and 2 secure points at corners of opposite sides. Test from 10-2000Hz	MIL-STD-202 Method 213
12	Resistance to Soldering Heat	Condition B. No pre-heat of samples. Note: Single Wave Solder – Procedure 2 for SMD with solder within 1.5mm of device body	MIL-STD-202 Method 210
13	Thermal Shock	-40/+125°C. Note: Number of cycles required is 300. Maximum transfer time is 20 seconds. Dwell time is 15 minutes. Air-Air	MIL-STD-202 Method 107
14	ESD		AEC-Q200-002
15	Solderability	Magnification 50x, a) Method B, 4 hrs @ 155°C dry heat @ 235°C, b) Method B @ 215°C category 3, c) Method D category 3 @ 260°C	J-STD-002
16	Electrical Characterization	Parametrically test per lot and sample size requirements, summary to show Min, Max, Mean and Standard deviation at room as well as Min and Max operating temperatures	E&E Product Specification
17	Flammability	V-0 or V-1 Acceptable	UL94
18	Board Flex	Appendix 2 Note: 2mm (Min)	AEC-Q200-005



2.5D Optical  
Auto Tracking Measuring  
System



X1000 Electronic  
Microscope



Specimen Cross Section

*(for materials and litz wire resistive  
welding inspection)*



potting voids inspection



resistive welding inspection

- Comprehensive and interactive indexed eCatalog for Power Magnetics, Networking Discretes and Magnetic Integrated Connectors (MIC) products
- Provide both online and offline FLASH, PDF, Mac OSX and iPad tablet formats
- Straightly web-based button-pick product selection guide



**MIC** + Collapse Attributes

Group Results in  5  10  15  all

<b>Speed</b> <input checked="" type="radio"/> ALL(33) <input type="radio"/> 10GBase-T(1) <input type="radio"/> 100Base-T(26) <input type="radio"/> 10Base-T(1) <input type="radio"/> 1000Base-T(4) <input type="radio"/> ADSL(1)	<b>Circuit Feature</b> <input checked="" type="radio"/> ALL(33) <input type="radio"/> Non PoE(30) <input type="radio"/> PoE(1) <input type="radio"/> PoE+(1) <input type="radio"/> THT(1)	<b>Ports</b> <input checked="" type="radio"/> ALL(33) <input type="radio"/> 1X4(1) <input type="radio"/> USB+RJ45(1)	<b>Operating Temp</b> <input checked="" type="radio"/> ALL(33) <input type="radio"/> -40°C to 85°C(10) <input type="radio"/> 0°C to 70°C(22)	<b>LEDs</b> <input checked="" type="radio"/> ALL(33) <input type="radio"/> None(17) <input type="radio"/> LED(15)
--	--	---	---	--

**INDUCTORS** + Collapse Attributes

Group Results in  5  10  15  all

<b>Mouting type</b> <input checked="" type="radio"/> ALL(23) <input type="radio"/> SMT(20) <input type="radio"/> THT(3)	<b>Construction</b> <input checked="" type="radio"/> ALL(23) <input type="radio"/> Shielded(14) <input type="radio"/> Unshiel	<b>Demimion L (mm)</b> <input type="radio"/> Surrender <input type="radio"/> Ascend	<b>Demimion W (mm)</b> <input type="radio"/> Surrender <input type="radio"/> Ascend	<b>Demimion H (mm)</b> <input type="radio"/> Surrender <input type="radio"/> Ascend
--	--	---	---	---

**LAN MAGNETICS** + Collapse Attributes

Group Results in  5  10  15  all

<b>Speed</b> <input checked="" type="radio"/> ALL(7) <input type="radio"/> 10GBase-T(1) <input type="radio"/> 100Base-T(3) <input type="radio"/> 1000Base-T(2) <input type="radio"/> 10Base-T(1)	<b>Circuit Feature</b> <input checked="" type="radio"/> ALL(7) <input type="radio"/> Non PoE(4) <input type="radio"/> PoE(2) <input type="radio"/> PoE+(1)	<b>Ports</b> <input checked="" type="radio"/> ALL(7) <input type="radio"/> Single(2) <input type="radio"/> Dual(3) <input type="radio"/> Quad(2)	<b>Demimion L (mm)</b> <input type="radio"/> Surrender <input type="radio"/> Ascend	<b>Demimion W (mm)</b> <input type="radio"/> Surrender <input type="radio"/> Ascend	<b>Demimion H (mm)</b> <input type="radio"/> Surrender <input type="radio"/> Ascend
---	--	--	---	---	---

Inductance (uH): 0.1 to 820

Search Within Results





- Guangzhou HQ to Hong Kong, 1.5 hrs. Drive
- Guangzhou to LuoDing, 3 hrs. Drive
- Guangzhou to Yangon, 3 hrs. Flight

## Guangzhou HQ

- >1,500 sq meter of Office Area
- 100 employees
- Logistic and IT; Sales & Marketing; Customer Services; R&D



## LuoDing Plant

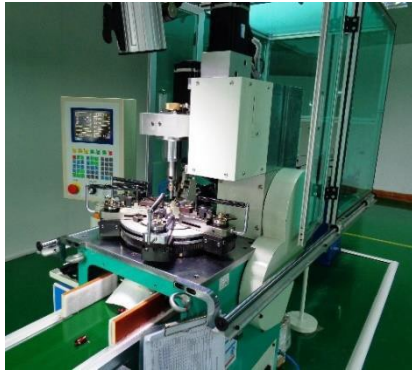
- ISO9001, ISO14001 & IATF16949 Certified
- Product Safety: UL, VDE, TUV, CB etc.
- >12,000 sq. meter Production Area in 2 buildings
- 2,000 employees
- Part of Purchasing & PMC
- Trial Run & Mass Production with auto/semi auto processes; Flat Wire Winding; Plastic Moldings
- Tooling Workshop; Manufacturing Eng'g; PMC



## Myanmar Plant

- Set up in April, 2013
- Hlaing Thar Yar Township, Yangon Division
- >7,000 sq meter of Production Area
- 1,000 employees
- ICM assembly & simple toroidal winding
- Manufacturing, Eng'g.
- Moved to self-owned factory in Dec. 2018





**Spiral Coil Winding**



**Integrated Line**



**Multi-Spindle Bobbin Winding**



**Wire Wound Inductors and Toroid Winding**



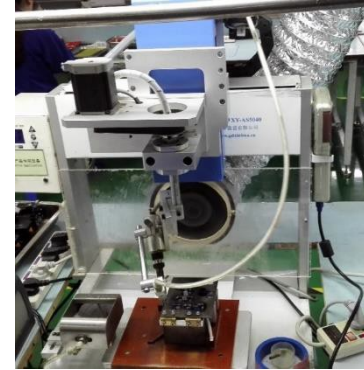
**Helical Flat Wire Coils Winding**







Insulation Tape Wrapping Machine



X-Y Soldering Machine



Miyachi's Auto Resistive Welding System



Vacuum Potting System

Capable to provide from A to D stage's samples according to customer requirements

Tooling Type	Design Stage	Method of Molding/Forming	Est. Lead-time (week)	Qty.
Plastic Parts	A	3D Print	1	10
	A & B	Silicon	2 ~ 4	10
	B, C & D	Soft Tooling	3 ~ 5	100~60K
	C & D	Hard Tooling	4 ~ 6	10K~500K
Metal Parts	A	Lazer Cut	1	500
	A	CNC	1 ~ 2	100
	B & C	Hard Tooling (Single Step)	3 ~ 4	1~5K
	C & D	Hard Tooling (Progressive)	4 ~ 6	10K~500K





## ELEKTRONIK **Blume**

**Wilhelm Haßenpflug**

**BLUME ELEKTRONIK DISTRIBUTION GMBH**

**TECCENTER 1 | 31162 | BAD SALZDETFURTH**

**FON:(0 50 63) 27 12-20 | FAX:(0 50 63) 27 12-12**

**EMAIL: HASSENPFUG@BLUME-ELEKTRONIK.DE**

**[www.blume-elektronik.de](http://www.blume-elektronik.de)**

partnership in excellence



**Elec & Eltek 依利安達**

E&E Magnetic Products Limited

**THANK YOU**