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TAEJIN Technology
HTC Korea

[Company Profile]

2013

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IDENTITY

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Company Name	TAEJIN Technology	Brand Name	HTC Korea
CEO	Tae-Hyouk, Choi	Business Domain	Developing & Manufacturing Semiconductor
Foundation Date	May 1, 2000	Major Products	Power Management ICs
Telephone Fax.	+82-42-933-9642 +82-42-933-9645	Home Page	www.htckorea.co.kr
Capital Stock (2012)	969 Million KRW (Approx. \$0.8M)	Revenue (2012)	16.2 Billion KRW (Approx. \$14.4M)
Address (HQ)	8F IAN Bldg, 152 Chengsa-ro, Seo-gu, Daejeon, 302-828, Korea		

BRIEF HISTORY

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Founding

- 2000. 05. Established TAEJIN Technology
- 2000. 05. Started producing Regulator IC
- 2000. 10. Registered brand name "HTC Korea"

Growing

- 2001. 03. Established a CMOS R&D Center in Korea
- 2002. 08. Set up a Sales Office in Shenzhen, China
- 2002. 10. Won the authorization for ISO 9001
- 2003. 09. Designated as a venture business
- 2004. 07. Registered a patent for TL432 (KIPO No.- 0442936)
- 2004. 12. Registered a patent for LM1117S-X.X (KIPO No.- 0456194)
- 2005. 10. Registered a patent for TL431 (KIPO No.- 0523799)

Leaping

- 2006. 07. Acquired a INNO-BIZ certificate (Grade : Aa)
- 2006. 09. Set up a Sales Office in Shanghai, China
- 2006. 09. Designated as a Specialized Components & Materials Company (SCMC) by the Korean Ministry of Commerce, Industry and Energy
- 2006. 11. Won the award in the "\$5millions in export"
- 2007. 01. Registered a patent for TJ3965 (KIPO No.- 0665454)
- 2007. 04. TJ3965 selected as New Excellent Technology(NET) by Korean Ministry of Science&Technology
- 2007. 06. Acquired an investment promotion as \$2millions
- 2007. 11. Won the authorization for ISO 14001
- 2007. 11. Registered international patents in USA / Japan (Trimming-free : 301056 / Low voltage ULDO : 301057)
- 2007. 11. Set up a Sales Office in Osaka, Japan
- 2008. 03. Set up a Sales Office in Taipei, Taiwan
- 2009. 05. Applied for international PCT patent (PCT/KR2009/2454)
- 2009. 08. Registered a local patent of ULDO Voltage Regulator IC in USA
- 2010. 06. Designated as "Technological Innovation Company" by Korean Ministry of Knowledge Economy
- 2010. 11. Won the award in the "USD 10 millions in export"
- 2012. 01. Moved Osaka Sales Office to Tokyo

LOCATIONS

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Head Office/ R&D (Korea)



Sales & Logistics (Korea)



Shenzhen Office (China)



Shanghai Office (China)



Taipei Office (Taiwan)



Tokyo Office (Japan)

HEADQUATERS

- ADD : 801 IAN bldg., 152 Cheongsa-ro, Seo-gu, Daejeon, 302-828, Korea
- TEL : +82 -42-933-9642
- FAX : +82 -42-933-9645

R&D CENTER HTC R&D Center in Korea

- ADD : 802 IAN bldg., 152 Cheongsa-ro, Seo-gu, Daejeon, 302-828, Korea
- TEL : +82 -42-933-9622
- FAX : +82 -42-933-9626

DOMESTIC SALES OFFICE

Seongnam Office, Korea (Domestic Sales and Logistics)

- ADD : 410 HYUNDAI-I-Valley, 223-12, Sangdaewon-dong, Jungwon-gu, Seongnam-si, Gyeonggi-do, KOREA.
- TEL : +82 -31-737-9621
- FAX : +82 -31-737-9629

OVERSEAS SALES OFFICE

Shenzhen Office, China (South China & HK)

- ADD : 13B, China Phoenix Bldg. No 2, 2008 Shennan Road, Futian District, ShenZhen, China
- TEL : + 86 - 755 - 8375- 7025~6
- FAX : + 86 - 755 - 8375 - 7023

Shanghai Office, China (East China)

- ADD : Rm 915, Huawei Intn. Bldg., No. 999 Zhong Shan West Road, Shanghai, China.
- TEL : + 86 - 21 - 6432-0886
- FAX : + 86 - 21 - 6432-0900

Taipei Office (Taiwan)

- ADD : 6F-5, No.18, Lane 48, Xingshan Rd, Neihu District, Taipei City, 11469, Taiwan
- TEL : +886 -2-8792-8925
- FAX : +886 -2-8792-8926

Tokyo Office, Japan (Japan)

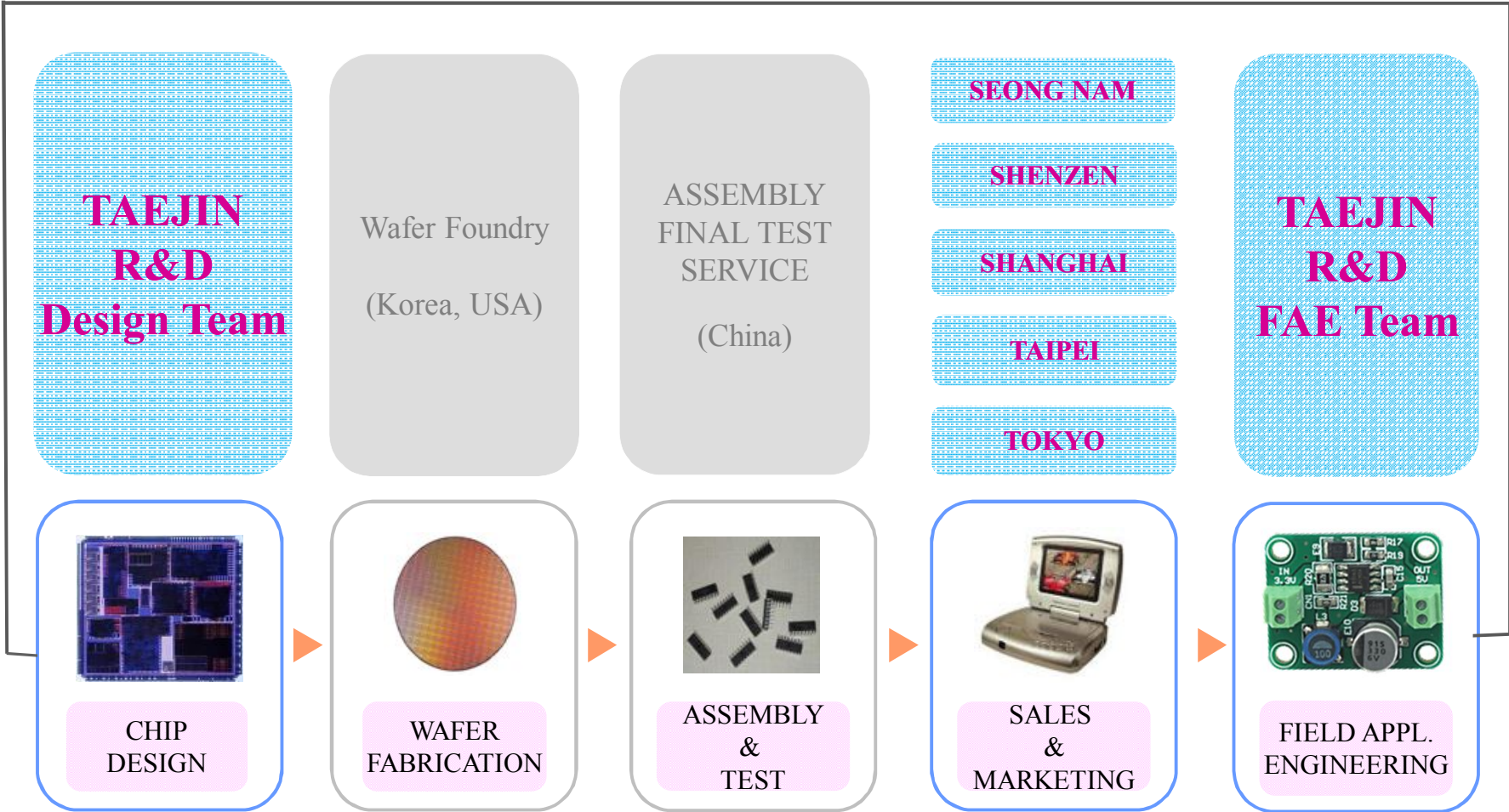
- ADD : Room 1402, Shinbashi Plaza Bldg., Shinbashi 4-9-1, Minato-Ku, 150-0004, Tokyo, Japan
- TEL : + 81 -3-6721-5321
- FAX : + 81 -3-6721-5322



PRODUCTION PROCEDURE

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Headquarters manages all processes of manufacturing & sales and reflects marketing feedback to design



MANUFACTURING PARTNERS

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Foundry



Assembly



MAJOR CUSTOMERS

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KOREA
Consumer



TAIWAN
Consumer



PC peripheral



JAPAN
Consumer



- PAVC in Osaka
- Network in Fukuoka
- Automotive in Yokohama



CHINA
Consumer



Global EMS



DELIVERY BRIEFS FOR MAJOR CUSTOMER

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Customer	Delivery Quantity					
	2008	2009	2010	2011	2012	2013
LG Electronics	13,552.5 K	14,823.2 K	31,250.4 K	32,409.5 K	50,222.5 K	-
	STB	+ DVD/HT	+BLU-LAY	+LCD TV	←	+Mobile Phone

LG전자(주) HE본부 구매담당 2012. 04. 19

수신 : 태진기술 사 대표이사
 발조 : 영업부서장
 제목 : '11년 하반기 납품성적 평가결과

貴社の 日益繁昌을 眞心으로 祈願합니다.
 협력회사 정기 납품성적 평가결과를 하기와 같이 통보 드리오니,
 차기 평가에는 개선하여 향상된 결과가 나타날 수 있도록 노력하여 주시기 바랍니다.

◇ 하 기 ◇

1. 평가기간 : 2011.07 ~ 2011.12 (6개월간 납품실적 기준)

2. 평가방법 :
 LG전자 전자 평가시스템인 TORCDM 평가시트를 활용하여 반기(6개월) 동안
 모기업 납품 실적을 근거로 동일 Commodity 內 거래선을 대상으로 평가 점수를 집계.
 [T Technology, Q Quality, R Responsiveness, D Delivery, C Cost, M Management]

3. 평가결과

사업부	평가 C/MDT	협력사명	T (100)	Q (300)	R (100)	D (200)	C (200)	M (100)	총점 (1,000)	Grade	C/MDT 평균
디스플레이	Regulator	태진기술	99	273.9	96	172	100	100	841	A	711

4. 납품성적 평가 결과에 대한 사후조치
 1) 평가등급에 따른 동일 Commodity內 협력사 운영전략 I/P 반영
 2) "D" 등급 1회일 경우 : 경고 및 6개월간 신규 개발 중단
 3) "E" 등급 1회 or "D" 등급 연속2회일 경우 : 거래중단

5. 기타 사항
 : 평가결과에 문의사항이 있으시면 회로구매 담당 HE반도체 구매팀으로 연락 바랍니다.
 [문의처 : 김희준 대리, Tel) 031-686-4038, E-mail : hoijun.kim@lge.com]

LG전자(주) / H E 본 부
 구매담당 부장 성 학 봉

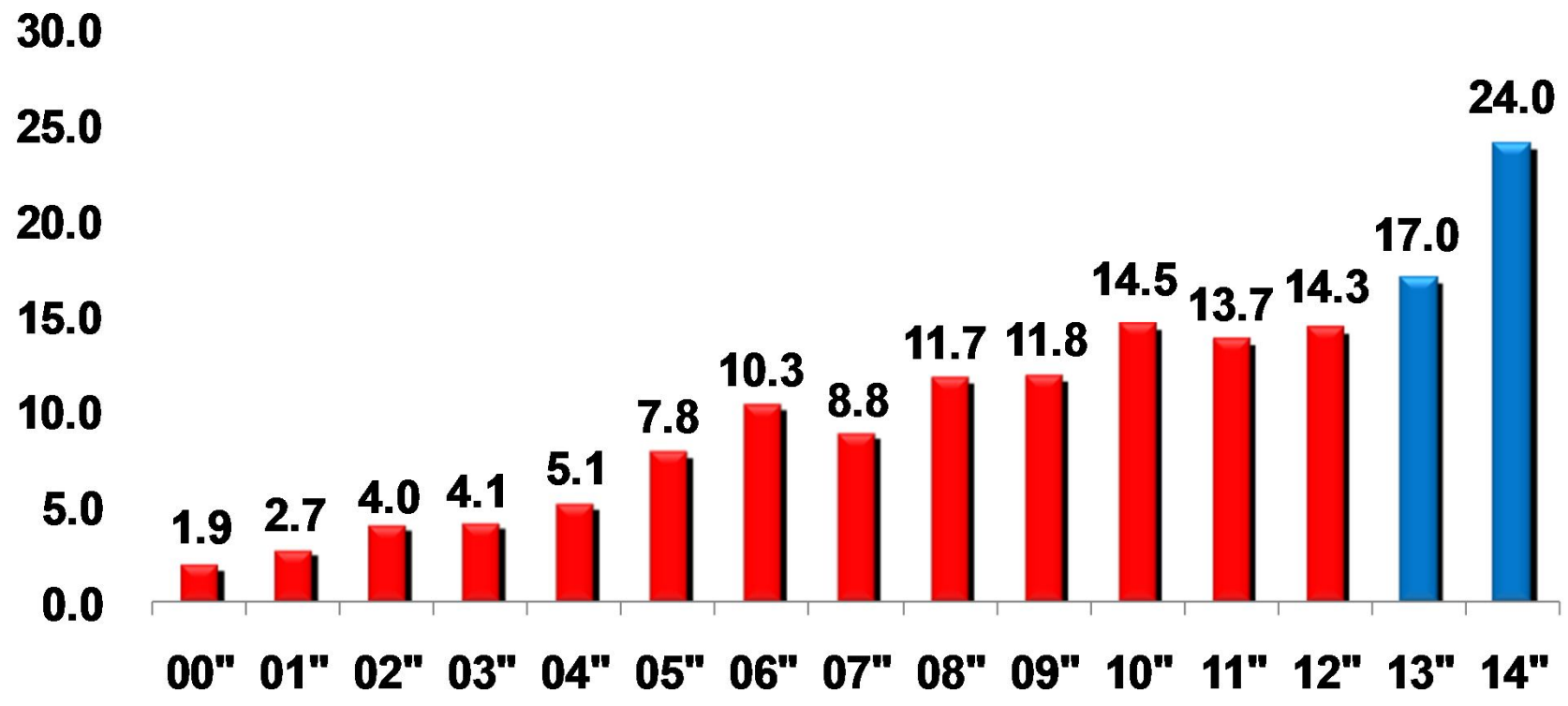
T (100)	Q (300)	R (100)	D (200)	C (200)	M (100)	총점 (1,000)	Grade	C/MDT 평균
99	273.9	96	172	100	100	841	A	711

- T : Technology
- Q : Quality
- R : Responsiveness
- D : Delivery
- C : Cost
- M : Management

ANNUAL SALES

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[UNIT : Million US Dollar]



SALES- BY REGION

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Authorized Distributor

KOREA

SeungJun SangSa.,Ltd.

CHINA

Shenzhen Penglida Elec. Ltd.
Shanghai BY

HONG KONG

Edal Electronics Co., Ltd.

TAIWAN

Pernas

JAPAN

Daiwa Wireless

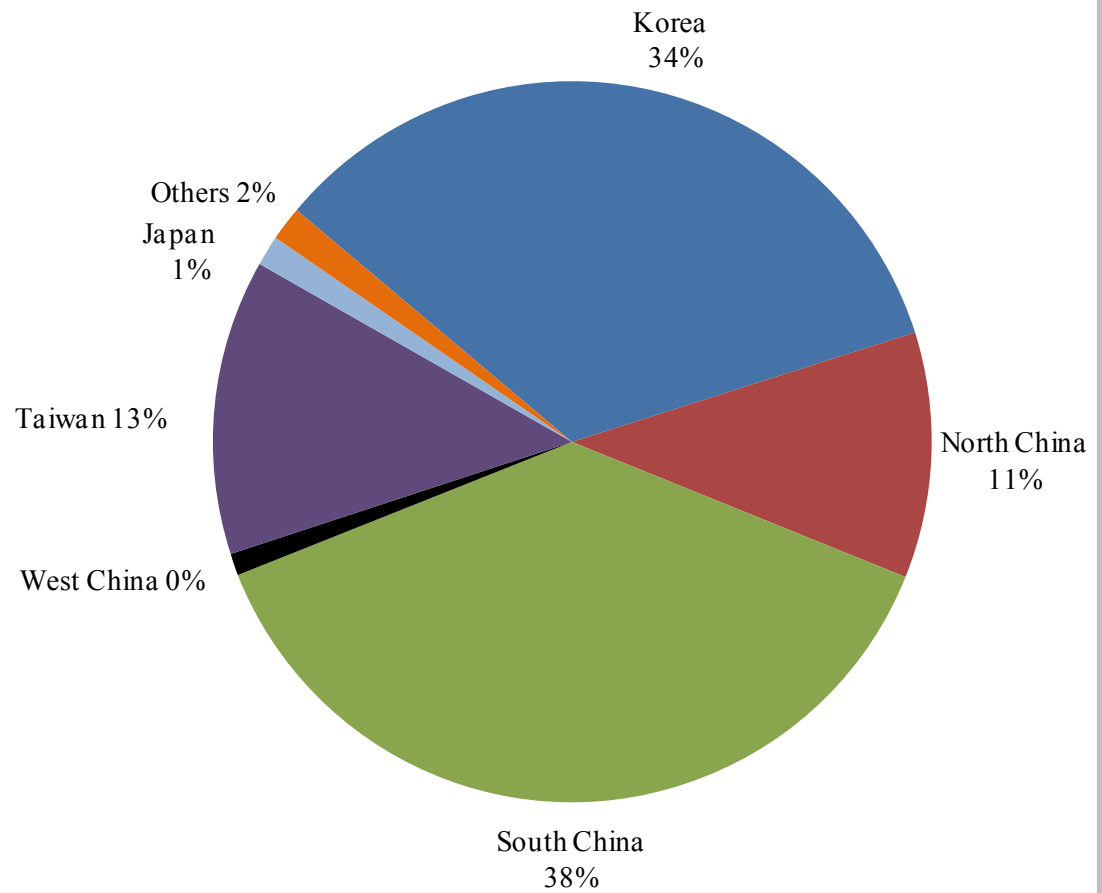
EUROPE

Maritex

USA

NAC

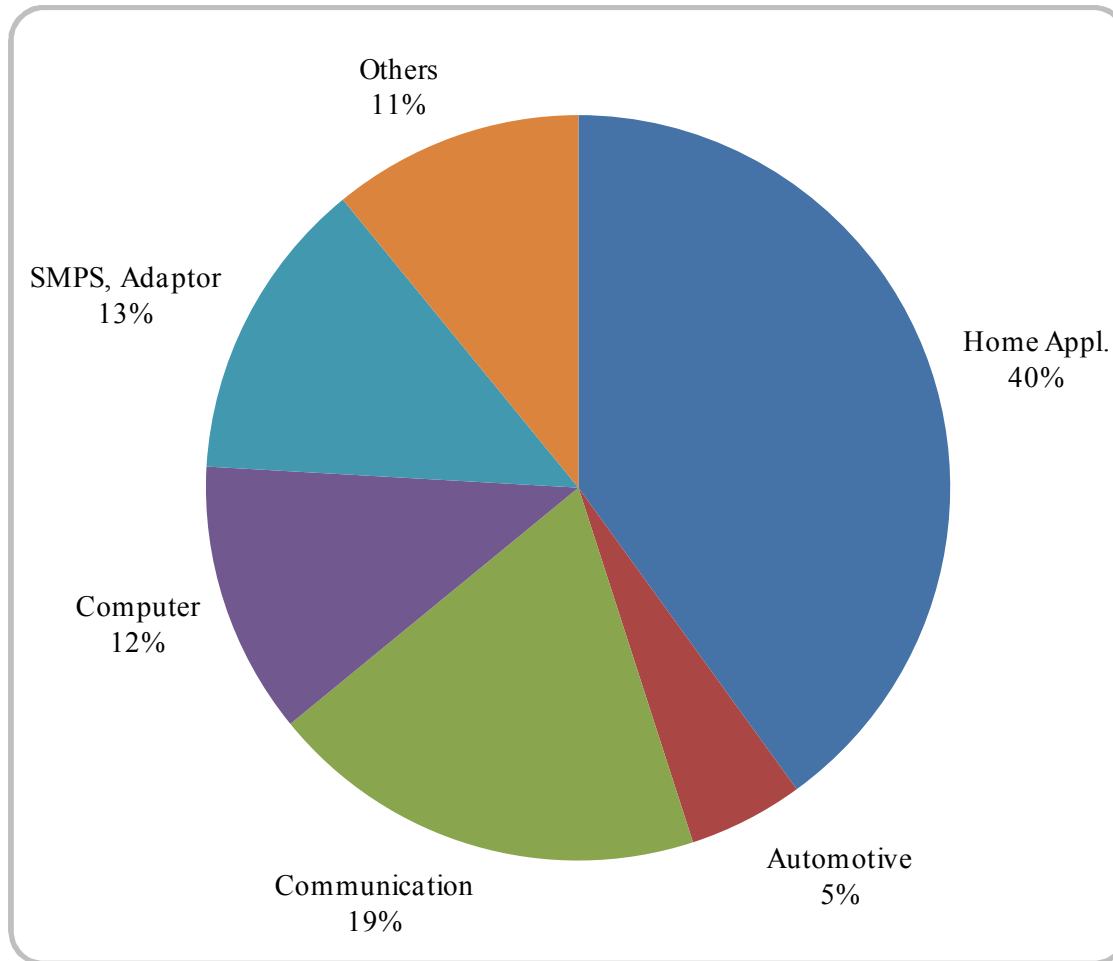
Regional Split (Shipment)



SALES - BY END-MARKET

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End-Market Split



Main Customers

CONSUMER

Samsung, LG,
Panasonic, Sanyo, Sharp
Skyworth, TCL, Vizio

COMMUNICATION

Panasonic Network

COMPUTER

ECS, ASUS

AUTOMOTIVE

Panasonic Automotive

SMPS / ADAPTOR

Dong Yang E&P,
Nichicon

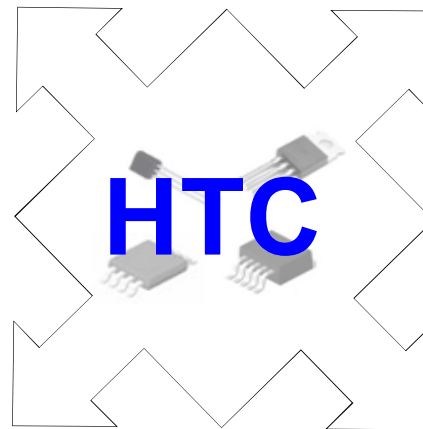
MAJOR APPLICATION

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Computing

Desktop PC
Notebook
Mother Board
Graphic Card
Industrial PC
Peripherals

WLAN
Router / xDSL
Telecom Server
Cell Phone / PDA
Wireless Telephone



Consumers

LCD/PDP Display
DVD Player
Blue-ray Player
Audio System
Set-top Box

GPS System
Car Audio
Car Navigation
Visual Equipments

Communications

Automotives

PRODUCT LINE-UP

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BATTERY



AC/DC



ADAPTOR



DC-DC Conversion

<u>Step-down</u>	<u>Controller</u>	<u>Synchronous</u>
LM2576	TL494	TJ6055/6056
LM2596	MC34063A	TJ6713/6723
TJ1509A	MC34063C	TJ6713/6723
TJ4519		TJ65251
<u>Step-up</u>		
LM1937		
LM5171		

Voltage Regulation

<u>Linear</u>	<u>LDO</u>	<u>VLDO</u>	<u>ULDO</u>	<u>DDR</u>
LM78LXX	LM2931	LM1185	TJ3964	TJ2995
LM79LXX	LM2950/1	LM1108	TJ3965	TJ2996
LM317L	LM1117	TJ5205	TJ3966	TJ2997
	LM108X	LM8805	TJ4915X	<u>USB Switch</u>
		LM2915X	TJ4930X	TJ2205
		LM39X0X	TJ4220	TJ2210
				TJ2105
				TJ2110

DC/DC Converter

Linear Regulator

Technical Trends of DC/DC Converter :

1. Higher Efficiency
2. Wide Conversion Range
3. Lower Output Voltage
4. Simpler Circuit
5. Smaller Package

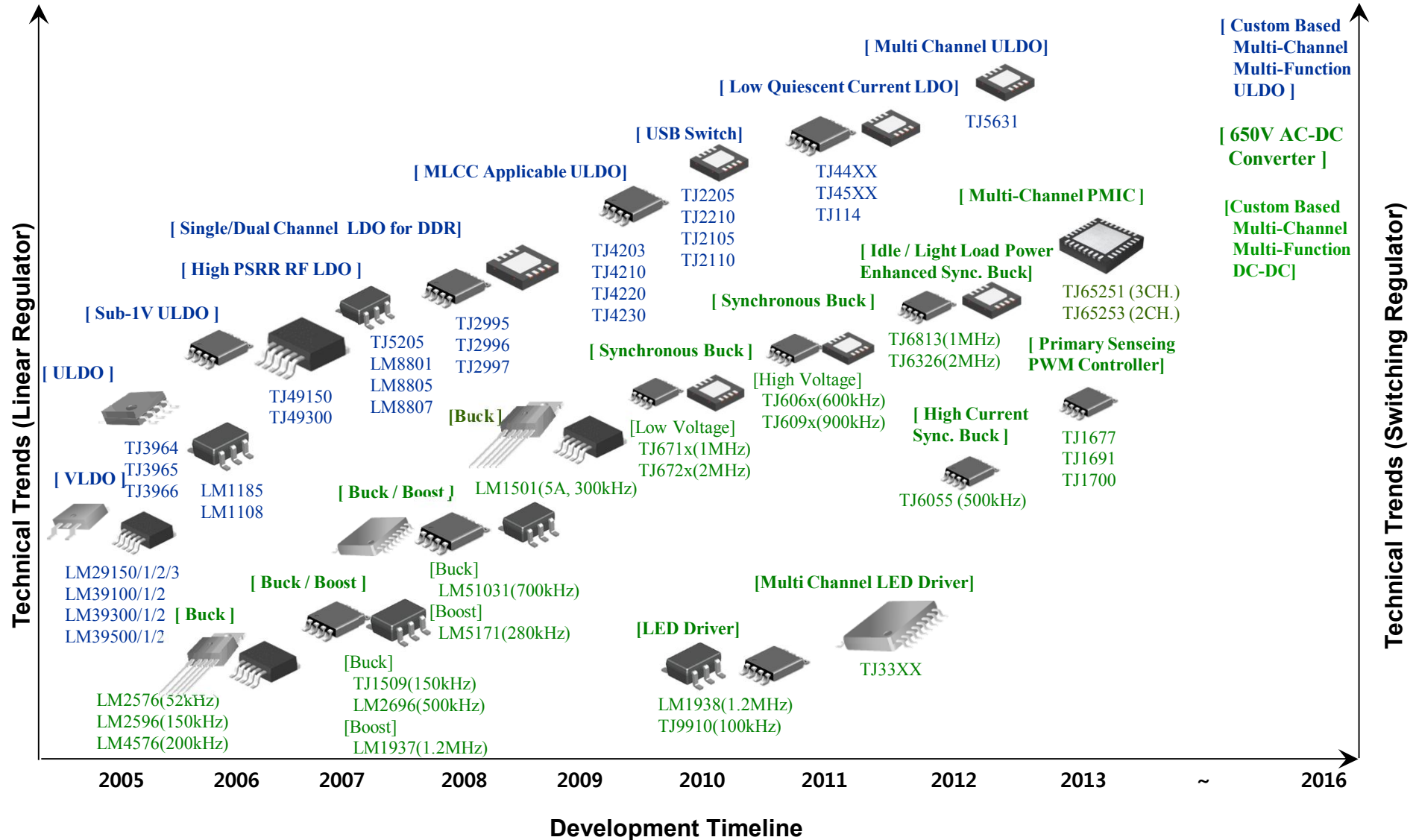
Technical Trends of Linear Regulator :

1. Lower Dropout
2. Lower Noise
3. Lower Output Voltage
4. Lower Ground Current
5. Smaller Package

MCU / CPU
Memory
Driver IC
ASIC
FPGA/CPLD

DEVELOPMENT ROADMAP

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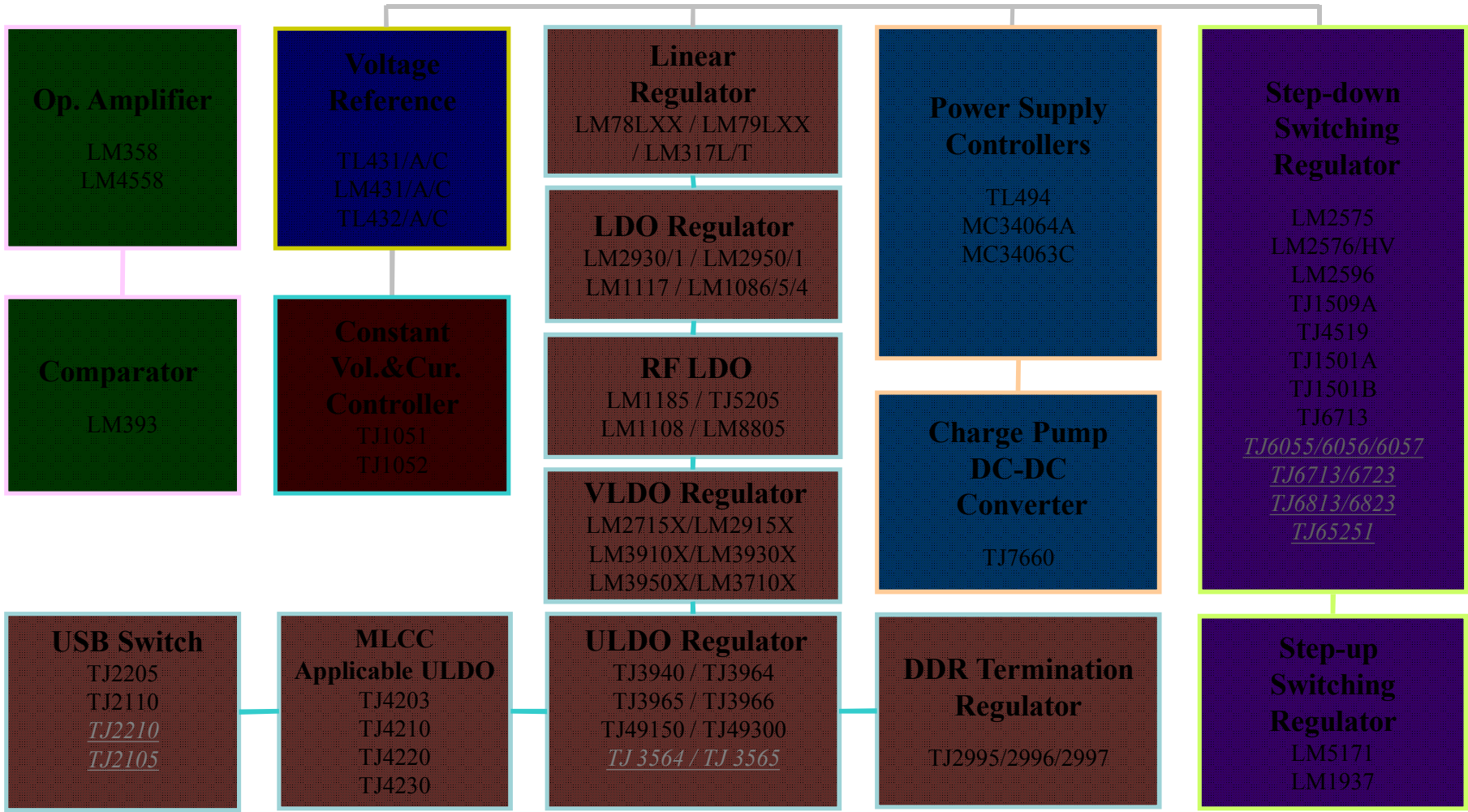


MAJOR PRODUCTS

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SIGNAL CONDITIONING

POWER MANAGEMENT



NATIONAL R&D PROJECTS (1)

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Year	Subject	Superintendent Government Agency
2004~2005	Development of Charge Pump DC to DC Converter IC	Small and Medium Business Administration
2004~2006	Development of Step-Down Switching Regulator IC	Ministry of Commerce, Industry and Energy
2005~2006	Development of Voltage-Current Controller for Mobile Charger	Small and Medium Business Administration
2007~2009	Development of Ultra Low Dropout Regulator Line-Up	Ministry of Commerce, Industry and Energy
2008~2010	Development of RF LDO Regulator Line-Up for Mobile Application	Small and Medium Business Administration
2008~2009	Development of High Power Conversion Efficiency 5A DC-DC Converter for FPD	Ministry of Knowledge Economy
2008~2010	Development of DDR Termination Regulator Line-Up	Small and Medium Business Administration

NATIONAL R&D PROJECTS(2)

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Year	Subject	Superintendent Government Agency
2010~2012	Development of High Efficiency Synchronous DC-DC Converters	Ministry of Knowledge Economy
2010~2012	Development of High Efficiency Power Management IC	Leading Industry Development For Economic Region
2011~2013	Development of Any-CAP ULDO Line-Up	Small and Medium Business Administration
2011~2013	Development of Intelligent LED Lighting SoC	Small and Medium Business Administration
2012~2015	Development of High Efficiency Mobile DC-DC Converter	Leading Industry Development For Economic Region
2012~2014	Development of Multi-Channel, Multi-Function System PMIC	Ministry of Knowledge Economy

PATENT ACHIEVEMENT (1)

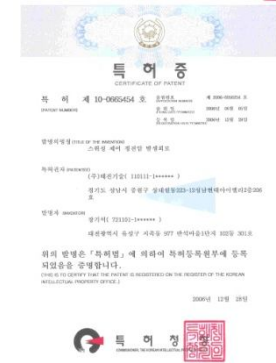
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Domestic Patent (Korea)

- Registered : 14 items

- 100442936 Regulator circuit for generating of stability voltage
- 100456194 Regulator circuit for generating of stability voltage
- 100523799 Regulator circuit for generating of stability voltage
- 100617966 Switching control Regulator circuit for generating of stability voltage
- 100665454 Switching control regulator circuit for generating of stability voltage
- 100813200 Regulator circuit for generating of stability voltage
- 100836529 Regulator circuit for generating stability voltage
- 100900266 Overheat protection circuit of a regulator
- 100900267 Sub-1V output Voltage regulator of ultra low dropout type
- 100902084 Voltage regulator and fabrication method thereof
- 100930275 Band Gap Reference Using CMOS
- 101184994 Fusing circuit
- 101247219 Current limit circuit
- 101268314 Waveform generator

- Applied : 8 items



PATENT ACHIEVEMENT(2)

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International Patent

USA

- Registered : 2 item
 - US 7,629,783 B2 : Ultra Low Dropout Voltage Regulator
 - US 7,999,525 B2 : Voltage Regulator and Method of Manufacturing the Same

CHINA

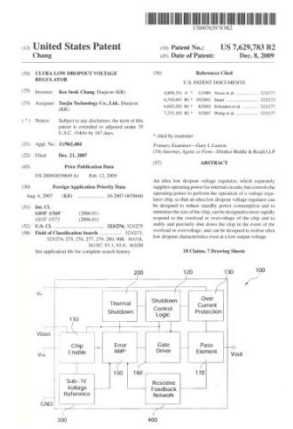
- Registered : 2 item
 - 705345 :超低压降型电压调节器
 - 1049457 :电压调节器其制造方法

TAIWAN

- Registered : 2 items
 - 381264 : Voltage Regulator and Method of Manufacturing the Same
 - 373699 : Ultra Low Dropout Voltage Regulator

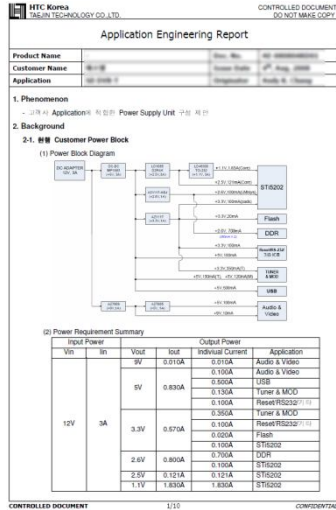
JAPAN

- Registered :1 item
 - 2007301057 : 超低压降下型电压レギュレーター

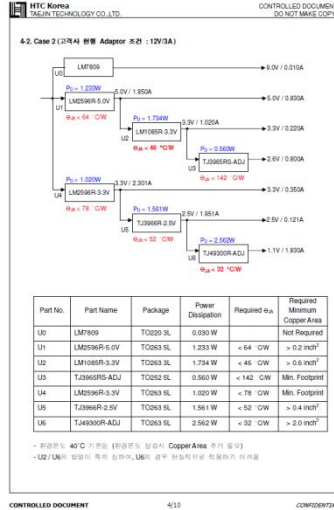


APPLICATION SUPPORT

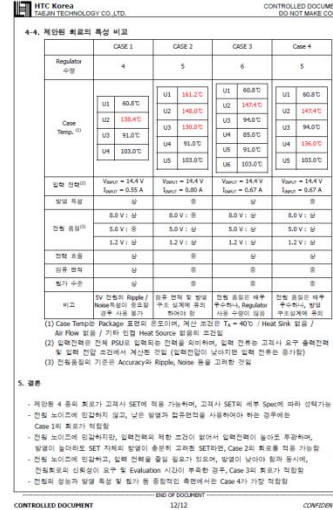
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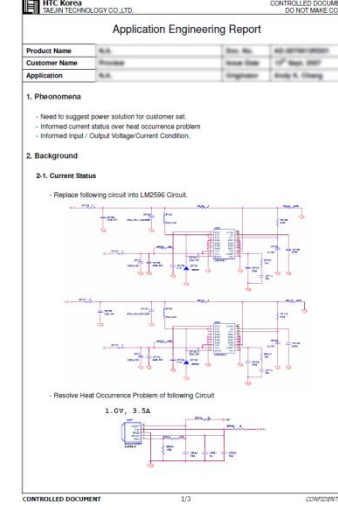
Power Analysis



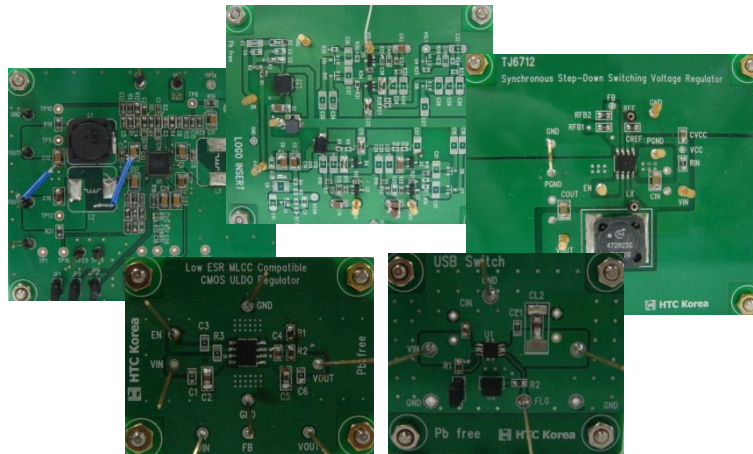
Power Tree Proposal



Cost-Quality Effective Solution Proposal



System Test & Analysis



Support Evaluation Boards

* Recent Application Support Example

Customer	Application	Remarks
LG Electronics	SETTOP BOX LCD TV BLU-LAY HOME THEATER	- Support various Power Trees for various systems
Samsung Electronics	SETTOP BOX (10 Models)	- Support Power Tree Design & Application (7~8 pcs/SET)

APPENDIX I

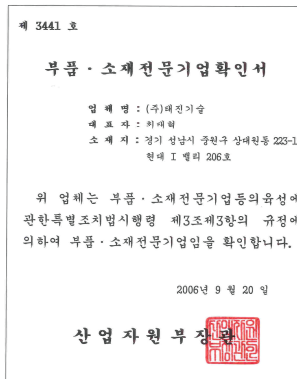
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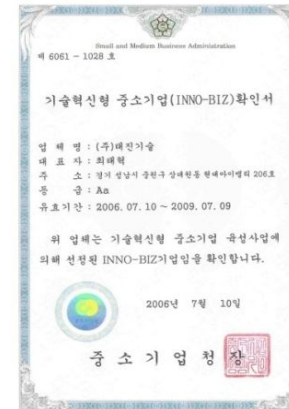
ISO 9001
Certificates



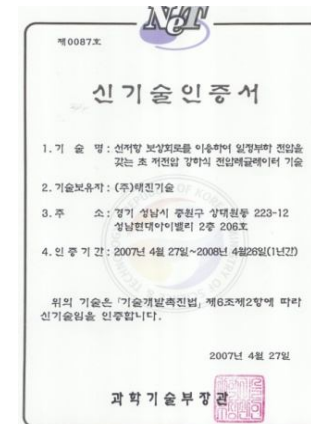
ISO14001
Certificates



Specialized Company
for
Component & Materials



INNO-BIZ Certificates
(Grade : Aa)



NET Authorization
(Electronics)

APPENDIX II : Product Line

- Linear Regulator (1)

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Standard Linear Voltage Regulator

Device Name	Tolerance	Typ Vout [V]	Max. Vin [V]	Min. Vin [V]	Max Iout [A]	Vdrop [V]	PKG
LM78L05	1%/2%/4%	5	20	7	0.1	1.7	TO-92 / SOT-89 SOP-8
LM78LXX	4%	6/ 8/ 9/ 10/ 12/ 15/ 18/ 24	20 ~ 39	8 ~ 26.5	0.1	1.7	TO-92 / SOT-89
LM79LXX	4%	5/ 6/ 8/ 9/12/ 15/ 18/ 24	-20 ~ -38	-7 ~ -27	0.1	1.7	TO-92 / SOT-89
LM317L	4%	Adjustable (1.25 ~ 37V)	40 (Absolute)	3	0.1	1.7	TO-92 / SOT-89 SOP-8

LDO (Low Drop Out) Voltage Regulator

Device Name	Vout [V]	Vref(adj) [V]	Max. Vin [V]	Max Iout [A]	V drop [V]	PKG
LM2931	ADJ	1.23	35 (Absolute)	0.1	0.3 (@Io=0.1A)	SOP-8
LM2950/1	3.0/ 3.3/ 5.0	Fixed Only	30 (Absolute)	0.1	0.38 (@Io=0.1A)	TO-92 / SOP-8
LM1117	ADJ/ 1.2/ 1.5/ 1.8/ 2.5/ 2.85/ 3.3/ 5.0	1.25	15 (Absolute)	1.0	1.2 (@Io=1.0A)	SOT-89 / SOT-223 TO-252
LM1086	ADJ/ 1.5/ 1.8/ 2.5/ 3.3/ 5.0	1.25	12 (Absolute)	1.5	1.3 ~ 1.5 (@Io=1.5A)	TO-252 / TO-263
LM1085	ADJ/ 1.5/ 1.8/ 2.5/ 3.3/ 5.0	1.25	12 (Absolute)	3.0	1.3 ~ 1.5 (@Io=3.0A)	TO-252 / TO-263
LM1084	ADJ/ 1.5/ 1.8/ 2.5/ 3.3/ 5.0	1.25	12 (Absolute)	5.0	1.3 (@Io=5.0A)	TO-252 / TO-263

APPENDIX II : Product Line

- Linear Regulator (2)

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VLDO (Very Low Drop Out) Voltage Regulator

Device Name	Vout [V]	Vref(adj) [V]	Max. Vin [V]	Max Iout [A]	V drop [V]	PKG
TJ5205 (EN / Bypass)	2.0 ~ 8.5	1.242	16	0.15	0.16 (@Io=0.15A)	SOT-23-5L SOP-8PP
LM27150/1/2 (EN / Flag)	ADJ/ 1.5/ 1.8 / 2.5/ 3.0/ 3.3/ 5.0/ 12	1.24	26 (peak 30V)	1.5	0.35 (@Io=1.5A)	TO-252 TO-263
LM29150/1/2 (EN / Flag)	ADJ/ 1.5/ 1.8 / 2.5/ 3.0/ 3.3/ 5.0/ 12	1.24	26 (peak 60V)	1.5	0.35 (@Io=1.5A)	TO-252 TO-263 TO-220
LM37101/2 (EN / Flag)	ADJ/1.5/ 1.8/2.5/ 3.3/ 5.0	1.24	16	1	0.47 (@Io=1.0A)	SOP-8
LM39100/1/2 (EN / Flag)	ADJ/ 1.5/ 1.8/2.5/ 3.3/ 5.0	1.24	16	1	0.41 (@Io=1.0A)	SOP-8 SOT-223 TO-252
LM39300/1/2 (EN / Flag)	ADJ/ 1.5/ 1.8/ 2.5/ 3.3/ 5.0	1.25	16	3	0.40 (@Io=3.0A)	TO-263
LM39500/1/2 (EN / Flag)	ADJ/ 1.5/ 1.8/2.5/ 3.3/ 5.0	1.25	16	5	0.40 (@Io=5.0A)	TO-263 TO-220

APPENDIX II : Product Line

- Linear Regulator (3)

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CMOS ULDO (Ultra Low Drop Out) Voltage Regulator

Device Name	Vout [V]	Vref(adj) [V]	Max. Vin [V]	Max Iout. [A]	Iqnd [μ A]	V drop [V]	PKG
LM1108	1.5 ~ 5.0	Fixed Only	6.5 (Absolute)	0.3	15	0.3 ~ 0.6 (@I _o =0.3A)	SOT-23 SOT-89
LM8805 (EN / Bypass)	1.5 ~ 6.0	1.27	8 (Absolute)	0.6	50	0.6 ~ 1.3 (@0.6A)	SOT-23 5L SOT-89
TJ3940	1.2/ 1.5/1.8/ 2.5/ 3.3	Fixed Only	5.5	1.0	30	0.45 (@I _o =1.0A)	SOT-223 TO-252
TJ3964 (EN / Sense)	ADJ/ 1.2/ 1.5/ 1.8/ 2.5/ 3.3	1.145	5.5	1.0	50	0.35 (@I _o =1.0A)	SOT-23-5L SOP-8 SOT-223 TO-252
TJ3965 (EN / Sense)	ADJ/ 1.2/ 1.8/ 2.5/ 3.3	1.145	5.5	1.5	30	0.38 (@I _o =1.5A)	SOP-8 SOP-8PP SOT-223 TO-252 / TO-263
TJ3966 (EN / Sense)	ADJ/ 1.2/ 1.8/ 2.5/ 3.3	1.145	5.5	3.0	40	0.48 (@I _o =3.0A)	SOP-8PP TO-252 TO-263

APPENDIX II : Product Line

- Linear Regulator (4)

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CMOS ULDO Voltage Regulator (Compatible with Low ESR Capacitor(MLCC))

Device Name	Vout [V]	Vref(adj) [V]	Max Vin [V]	Min Vin [V]	Max Iout [A]	V drop [V]	PKG
TJ114	0.8~ 3.6	Fixed Only	5.5	2.0	0.3	0.26 (@Io=0.3A)	DFN1010-4 DFN1216-4 SC70-5 / SOT23-5
TJ4203 (EN / Sense)	ADJ/ 1.0/ 1.2/ 1.5 /1.8/ 2.5/ 3.3	0.8	5.5	2.4	0.3	0.40 (@Io=0.3A)	SOT23-5L
TJ4210 (EN / Sense)	ADJ/ 1.0/ 1.2/ 1.5 /1.8/ 2.5/ 3.3	0.8	5.5	2.4	1.0	0.35 (@Io=1.0A)	SOP-8 TO-252
TJ4220 (EN / Sense)	ADJ/ 1.0/ 1.2/ 1.5 /1.8/ 2.5/ 3.3	0.8	5.5	2.4	2.0	0.40 (@Io=2.0A)	SOP-8PP TO-252
TJ4230 (EN / Sense)	ADJ/ 1.0/ 1.2/ 1.5 /1.8/ 2.5/ 3.3	0.8	5.5	2.4	3.0	0.45 (@Io=3.0A)	SOP-8PP TO-252
TJ1118	1.0/1.2/1.5/1.8 /2.5/3.3	Fixed Only	5.5	2.4	1.0	0.45 (@Io=1.0A)	SOT-223 T-252
TJ47300 (EN / PG)	ADJ	0.8	5.5	1.4	3.0	0.30 (@Io=3.0A)	SOP-8PP
TJ49150 (EN)	ADJ	0.8	5.5	1.4	1.5	0.20 (@Io=1.5A)	SOP-8PP TO-252
TJ49300 (EN)	ADJ	0.8	5.5	1.4	3.0	0.30 (@Io=3.0A)	SOP-8PP TO-252 / TO-263

: Products Under Pilot Production.

APPENDIX II : Product Line

- Linear Regulator (5)

DO NOT MAKE COPY

Sink / Source Linear Regulator (DDR Termination Regulator)

Device Name	Standards	AVIN [V]	PVIN [V]	VDDQ [V]	Vout	Sink & Source Current [A]	PKG
TJ2995	DDR-I/II	2.3 ~ 5.5	0 ~ AVIN	1.8 ~ 2.5	Vtt / Vref	1.5 (Cont.) 3.0 (Peak)	SOP-8 / SOP-8PP
TJ2996	DDR-I/II	2.3 ~ 5.5	0 ~ AVIN	1.5 ~ 2.5	Vtt / Vref	1.5 (Cont.) 3.0 (Peak)	SOP-8 / SOP-8PP
TJ2997	DDR-I/II/III	2.3 ~ 5.5	0 ~ AVIN	1.5 ~ 2.5	Vtt / Vref	1.5 (Cont.) 3.0 (Peak)	SOP-8 / SOP-8PP

USB Power Switch

Device Name	Channel	Enable Control	Vin [V]	Icc [uA]	Min.I limit [A]	Rds,on [V]	PKG
TJ2110	Single	H – High L – Low	2.7 ~ 5.5	80	1.5	120	SOT-23-5L MSOP-8 / SOP-8
TJ2205	Dual	H – High L – Low	2.7 ~ 5.5	90	1.0	160	SOP-8
TJ2215	Dual	H – High L – Low	2.7 ~ 5.5	80	1.5	125	SOP-8
TJ2100	Single	H – High L – Low	2.7 ~ 5.5	80	Adjustable (0.2A ~ 3A)	70	SOT23-6L DFN2x2-6L

APPENDIX II : Product Line

- Switching Regulator (1)

DO NOT MAKE COPY

Step-down Switching Voltage Regulator (Non-Synchronous DC-DC Converter)

Device Name	Vout [V]	Vref(adj) [V]	Max.Vin [V]	Output Current [A]	Switching Frequency [kHz]	PKG
LM2575	ADJ/ 3.3/ 5.0/ 12	1.23	40	1.0	52	TO-263 TO-220
LM2576	ADJ/ 3.3/ 5.0/ 12	1.23	40	3.0	52	TO-263 TO-220
LM2576HV	ADJ/ 3.3/ 5.0/ 12	1.23	60	3.0	52	TO-263 TO-220
LM2596	ADJ/ 3.3/ 5.0/ 12	1.23	40	3.0	150	TO-263 TO-220
LM1501A	ADJ/ 3.3/ 5.0/ 12	1.215	40	5.0	150	TO-263 TO-220
LM1501B	ADJ/ 3.3/ 5.0/ 12	1.215	40	5.0	300	TO-263 TO-220
TJ1509A	ADJ/ 3.3/ 5.0/ 12	1.23	30 (Absolute)	2.0	150	SOP-8
TJ4519	ADJ	0.8	28 (Absolute)	3.0	600	SOP-8PP

APPENDIX II : Product Line

- Switching Regulator (2)

DO NOT MAKE COPY

Synchronous Step-down Switching Regulator (Synchronous DC-DC Converter)

Device Name	Vout [V]	Vref(adj) [V]	Max.Vin [V]	Output Current [A]	Switching Frequency [kHz]	On-Resistance [Ω]		PKG
						High-Side	Low-Side	
TJ1583	ADJ	1.22	23	3.0	385	0.1	10	SOP-8 / SOP-8PP
TJ1591	ADJ	1.22	32	2.0	300	0.12	8.5	SOP-8 / SOP-8PP
TJ6055	ADJ	0.8	18	5.0	500	0.1	0.04	SOP-8 / SOP-8PP
TJ6056	ADJ	0.8	18	6.0	500	0.1	0.04	SOP-8 / SOP-8PP
TJ6058	ADJ	0.8	18	8.0	500	0.1	0.04	SOP-8 / SOP-8PP
TJ6712	ADJ	0.8	5.0	2.0	1,000	0.13	0.16	SOP-8 / SOP-8PP
TJ6713	ADJ	0.8	5.0	3.0	1,000	0.13	0.16	SOP-8 / SOP-8PP
TJ6722	ADJ	0.8	5.0	2.0	2,000	0.13	0.16	SOP-8 / SOP-8PP
TJ6723	ADJ	0.8	5.0	3.0	2,000	0.13	0.16	SOP-8 / SOP-8PP
TJ6813	ADJ	0.8	5.5	3.0	1,000	0.13	0.16	SOP-8 / SOP-8PP
TJ6823	ADJ	0.8	5.5	3.0	2,000	0.13	0.16	SOP-8 / SOP-8PP

: Products Under Pilot Production.

: Products Under Development.

APPENDIX II : Product Line

- Switching Regulator (3)

DO NOT MAKE COPY

Step-up Switching Voltage Regulator

Device Name	Vin [V]	Switch Current Limit [A]	Max Vsw [V]	Supply Current	Frequency [kHz]	PKG
LM1937	2.5~10	0.30	36	0.1uA (Shut-off) 1.9mA (Shut-on)	1,200	SOT-23-5L
LM1938	2.5~10	0.60	36	0.1uA (Shut-off) 1.9mA (Shut-on)	1,200	SOT-23-6L
LM5171	2.5 ~ 30 (Absolute)	1.50	40 (Absolute)	12uA (Shut-off) 5.5mA (Shut-on)	280	SOP-8

Converter & Controller – Step-Up/Down Converter Controller

Device Name	Supply Voltage [V]	Switch Current [A]	Reference Accuracy	Quiescent Current [mA]	Comparator input voltage [V]	PKG
MC34063A/B	50 (Absolute)	1.5	2%	2.5	-0.3 ~ 40	SOP-8 DIP-8
MC34063C/D	40 (Absolute)	1.2	2%	2.5	-0.3 ~ 40	SOP-8 DIP-8

APPENDIX II : Product Line

- Multi-Channel DC-DC Converter

DO NOT MAKE COPY

Device Name	Vout [V]	Vref(adj) [V]	Max. Vin [V]	Output Current [A]	Switching Frequency [MHz]	On-Resistance [Ω]		PKG
						High-Side	Low-Side	
TJ65251 (3CH.DC-DC with 3 LDOs)	All ADJ. (for LDOs : 3.3/5.0/6.25)	0.8	16	CH1 - 3A CH2 - 3A CH3 - 3A	Adj. (0.5~1.2)	CH1- 0.12 CH2- 0.12 CH3- 0.12	CH1- 0.08 CH2- 0.08 CH3- 0.08	QFN40
TJ65253 (2CH. DC-DC with 3 LDOs)	All ADJ. (for LDOs : 3.3/5.0/6.25)	0.8	16	CH1 - 3A CH2 - 3A	Adj. (0.5~1.2)	CH1- 0.12 CH2- 0.12	CH1- 0.08 CH2- 0.08	QFN28

: Products Under Pilot Production.

: Products Under Development.

APPENDIX II : Product Line

- New Products

DO NOT MAKE COPY

High Efficiency Low Noise Fast Transient DC-DC Converter

Product Name	V _{IN_MIN} [V]	V _{IN_MAX} [V]	V _{OUT_MIN} [V]	V _{OUT_MAX} [V]	I _{OUT} [mA]	F _{SW} [MHz]	I _Q [uA]	I _{SHTDN} [uA]	PKG
TJ6323	2.7	5.5	0.6	VIN	300	2	40 ~ 80	1	TSOT DFN
TJ6326	2.7	5.5	0.6	VIN	600	2	40 ~ 80	1	TSOT DFN
TJ6320	2.7	5.5	0.6	VIN	1000	2	40 ~ 80	1	TSOT DFN
TJ6343	2.7	5.5	0.6	VIN	300	4	40 ~ 80	1	TSOT DFN
TJ6346	2.7	5.5	0.6	VIN	600	4	40 ~ 80	1	TSOT DFN
TJ6340	2.7	5.5	0.6	VIN	1000	4	40 ~ 80	1	TSOT DFN

This line of product is designed to maintain high efficiency throughout the operating range, which is critical for portable applications.

: UNDER DEVELOPMENT / Available at 4Q, 2013



THANK YOU !