



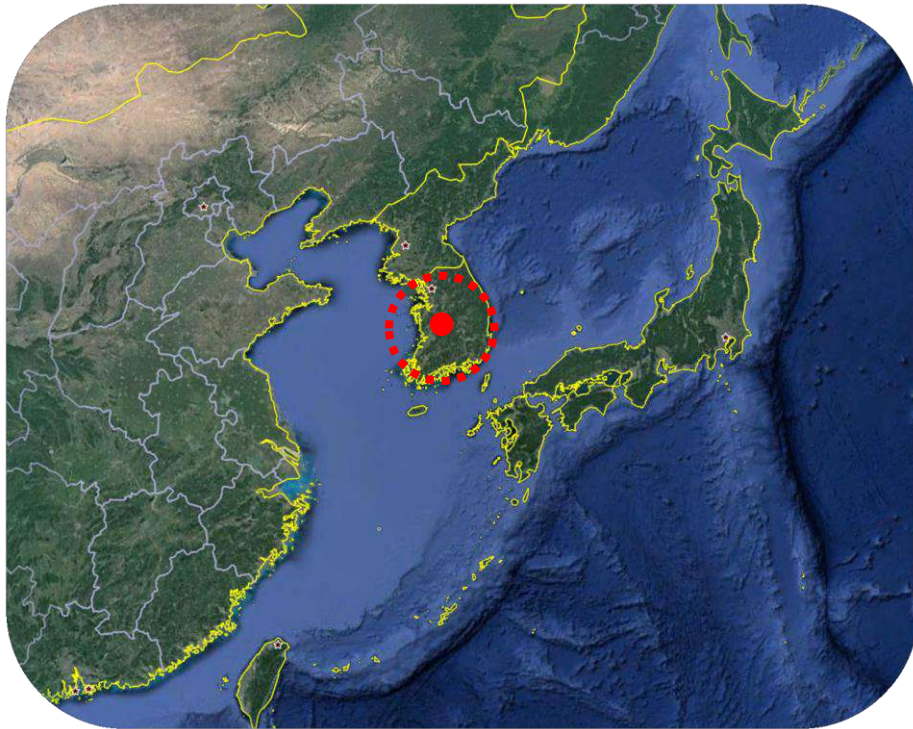
COMPANY OVERVIEW

TAEJIN Technology Co., Ltd.
2026. 04.

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LOCATION



- * Company Name : TAEJIN Technology Co., Ltd.
- * Brand Name : HTC Korea
- * Location : DAEJEON, South Korea
- * Category : Semiconductor Manufacturer
- * Major Products : Power Management ICs

MANUFACTURING PARTNERS



Foundry



(Former Dongbu HiTek  Dongbu HiTek)

Assembly



MAJOR CUSTOMERS

KOREA

Consumer



Automotive



Industrial



JAPAN

Consumer



Automotive



Industrial



EUROPE

Industrial



Global EMS



CHINA

Consumer



Automotive



USA

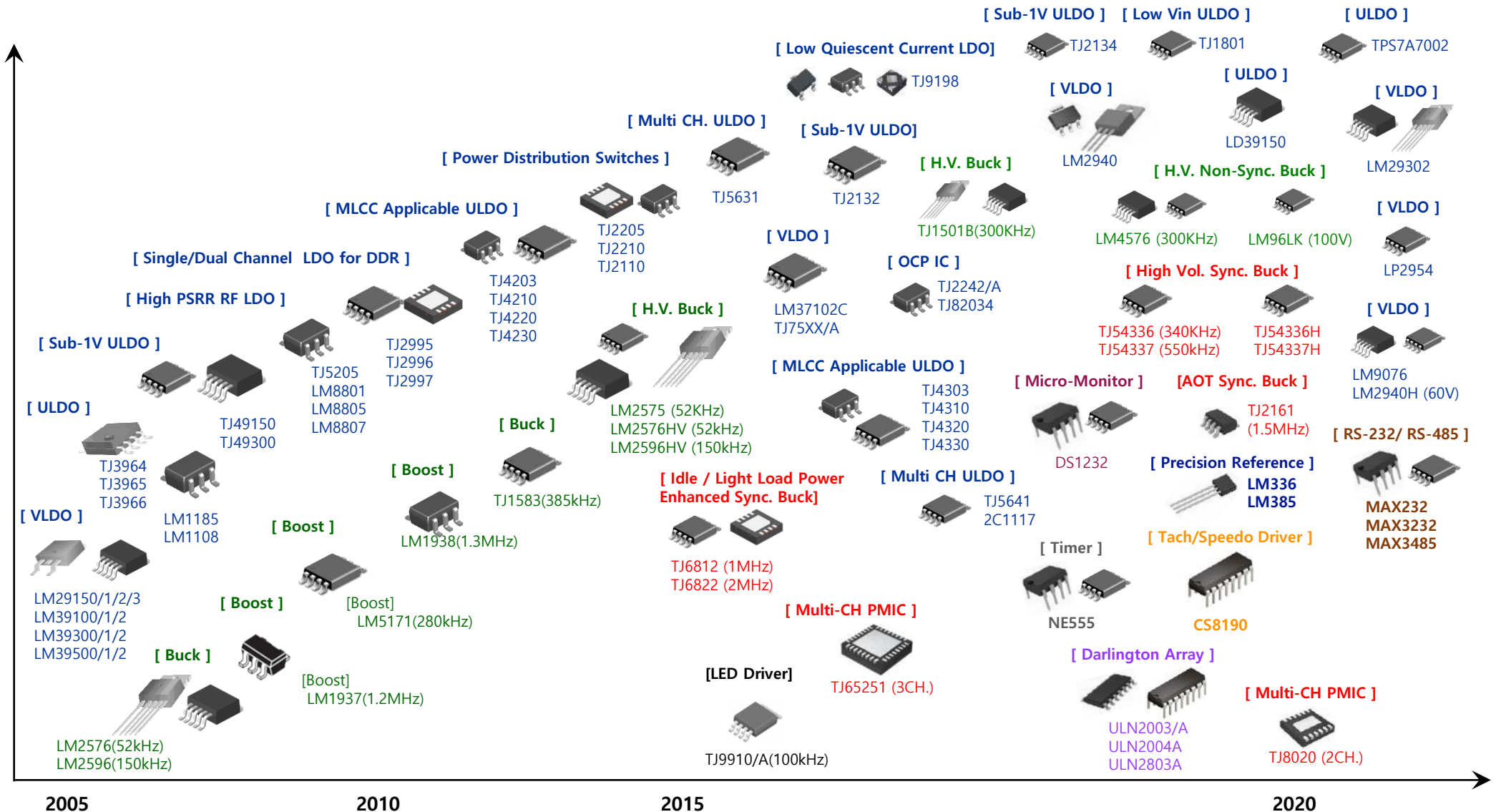
Consumer



Industrial



DEVELOPMENT ROADMAP



Development Timeline

BRIEF PRODUCT LINE



Linear Power ICs	Voltage References	$V_{IN,MAX}$ Up to 40V	$I_{KA,MIN}$ From 30uA	$V_{REF} = 1.24/2.495/2.5V$
	General Regulators	$V_{IN,MAX} = 20V \sim 40V$	$I_{OUT} = 0.1A \sim 0.5A$	$V_{DROP} = 1.7V \sim 3.0V$
	LDO Regulators	$V_{IN,MAX} = 12V \sim 30V$	$I_{OUT} = 0.1A \sim 5.0A$	$V_{DROP} = 0.38V \sim 1.4V$
	VLDO Regulators	$V_{IN,MAX} = 10V \sim 30V$	$I_{OUT} = 0.1A \sim 3.0A$	$V_{DROP} = 0.165V \sim 0.6V$
	CMOS ULDO Regulators	$V_{IN,MAX} = 5.5V \sim 6.5V$	$I_{OUT} = 0.3A \sim 4.0A$	$V_{DROP} = 0.2V \sim 0.6V$
	DDR Terminators	$V_{IN,MAX} = 5.5V$	$I_{OUT} = 2.0A$	DDR II / III / IV
	Power Distribution Switches	$V_{IN,MAX} = 5.5V$	$I_{LIMIT} = \text{Adjustable, up to 2.25A}$	$R_{DS,ON} = 70 \sim 100 \text{ m}\Omega$
Switching Power ICs	Non-Sync. DC-DC Converters	$V_{IN,MAX} = 40V \sim 60V$	$I_{OUT} = 1.0A \sim 5.0V$ $F_{SW} = 52 \sim 300 \text{ kHz}$	$V_{SAT} = 1.05 \sim 1.65 \text{ V}$
	Sync. DC-DC Converters	$V_{IN,MAX} = 5.5V \sim 23V$	$I_{OUT} = 1.0A \sim 5.0V$ $F_{SW} = 340 \sim 2,000 \text{ kHz}$	$R_{ON,HS} = 100 \sim 130 \text{ m}\Omega$ $R_{ON,LS} = 60 \sim 100 \text{ m}\Omega$
	Converters / Controllers	$V_{IN,MAX} = 10.5V \sim 40V$	$I_{OUT} = 1.2A \sim 1.5A$ (or External Power SW) $F_{SW} = 10 \sim 500 \text{ kHz}$	Various Power Switches
Signal Processing	OPAMPs / Comparators	$V_{IN,MAX} = 18V \sim 45V$	Dual CH. ~ Quad CH.	$V_{Input Offset} = 2mV \sim 7mV$
	Interface ICs	$V_{IN} = 3.3V \sim 5V$	No. of Tx = 1 ~ 2 No. of Rx = 1 ~ 2	ESD = $\pm 2kV \sim \pm 15kV$
	Darlington Transistor Arrays	$V_{CE,MAX} = 50V$	$I_{OUT} = 0.5A, V_{SAT} = 1.3V$	7-Digits
	Logic ICs	$V_{CC,MAX} = 6V$	$ I_{OH,MAX} = I_{OL,MAX} = 5.2mA$	74HC Series

High Performance Linear Power ICs



Device Name	V _{OUT} [V]	V _{REF} [V]	V _{IN_MIN} [V]	V _{IN_MAX} [V]	I _{OUT_MAX} [A]	V _{DROP_TYP} [V]	I _{Q_TYP} [mA]	PKG
TPS761xx	ADJ/ 2.0~8.5	1.242	2.5	16	0.15	0.165 (@I _{LOAD} =0.15A)	0.120	SOT-23-5L
TPS73001	ADJ	0.6	2.5	6.0	0.3	0.20 (@I _{LOAD} =0.3A)	0.10	SOT-23-6L
TPS730xx	0.8 ~ 3.6	Fixed	2.2	5.5	0.3	0.20 (@I _{LOAD} =0.3A)	0.035	SOT-23-5L
TPS740xx	ADJ/ 1.5 ~ 6.0	1.27	2.5	6.5	0.6	0.6 ~ 1.3 (@I _{LOAD} =0.6A)	0.050	SOT-23-5L
TPS1117LVxx	1.0/ 1.2/ 1.5/ 1.8/ 2.5/ 2.8/ 3.3	Fixed	2.5	5.5	1.0	0.40 (@I _{LOAD} =1.0A)	0.13	SOT-223-3L
TPS7A8001	ADJ	0.6	2.5	5.5	1.0	0.35 (@I _{LOAD} =1.0A)	0.15	DFN3x3-8
TPS7A7001	ADJ	0.6	2.5	5.5	2.0	0.40 (@I _{LOAD} =2.0A)	0.20	SOP-8PP
TPS7A7002	ADJ	0.6	2.5	5.5	3.0	0.40 (@I _{LOAD} =3.0A)	0.20	SOP-8PP
TPS7A4501	ADJ	1.24	2.25	26	1.5	0.35 (@I _{LOAD} =1.5A)	8	TO-263-5L
TPS75701	ADJ	1.25	2.25	16	3.0	0.40 (@I _{LOAD} =3.0A)	10	TO-263-5L
TPS75501	ADJ	1.25	2.25	16	5.0	0.40 (@I _{LOAD} =5.0A)	15	TO-263-5L

Device Name	Channel	Enable Control	V _{IN} [V]	I _{CC} [μA]	I _{CON_MAX} [A]	I _{LIMIT} [A]	R _{DS_ON} [mΩ]	PKG
TPS2553D	Single	High	2.8 ~ 5.5	90	1.5	ADJ (0.2 ~ 2.25)	100	SOT-23-6L

Device Name	Standards	A _{VIN} [V]	P _{VIN} [V]	V _{DDQ} [V]	V _{OUT} [V]	I _{SINK} & I _{SOURCE} [A]	PKG
LP2998	DDR-2/3/3L/4	3.0 ~ 5.5	0 ~ 2.0	1.2 ~ 1.8	VTT/ VREF	2.0 (Cont.) 3.0 (Peak)	SOP-8/ SOP-8PP



Very Low Dropout Regulators



Device Name	V _{OUT} [V]	V _{REF} [V]	V _{IN_MIN} [V]	V _{IN_MAX} [V]	I _{OUT_MAX} [A]	V _{DROP_TYP} [V]	I _{O_TYP} [mA]	PKG	Compatible Parts
TJ75xxA	3.3/ 5.0	Fixed	2.7	30	0.1	0.60 (@I _{LOAD} =50mA)	0.001	SOT-23-5L/ SOT-89-3L	HT75xx
LM2950/1	3.3/ 5.0	Fixed	4.3	30 (Absolute)	0.1	0.38 (@I _{LOAD} =0.1A)	0.075	TO-92/ SOP-8	LP2950, MIC2950, NCV4264
LM2950G	2.5/ 3.3/ 5.0	Fixed	4.3	30	0.1	0.38 (@I _{LOAD} =0.1A)	0.075	TO-92/SC-70-5L	LP2950, MIC2950, NCV4264
TJ5205	ADJ/ 2.0~8.5	1.242	2.5	16	0.15	0.165 (@I _{LOAD} =0.15A)	0.120	SOT-23-5L/ SOP-8/ SOP-8PP	TPS788xx, LP2985A, TPS761xx, LD2981, LD2985, MIC5205, MIC5247, LD2980
LM9076	3.3/ 5.0	Fixed	5.35	40	0.15	0.15 (@I _{LOAD} =0.15A)	0.025	SOP-8/ TO-263-5L	LM9076
TJ62FPxx	2.8/ 3.0/ 3.3	Fixed	2.5	10	0.25	0.40 (@I _{LOAD} =0.16A)	0.001	SOT-23-3L/ SOT-89-3L	XC62FPxx
TJ75xx	3.3/ 5.0	Fixed	2.7	20	0.25	0.40 (@I _{LOAD} =0.16A)	0.001	TO-92/ SOT-89-3L	C78LC5xx, LDK320, MCP1701, MCP1702
LP2954	ADJ/ 5.0	1.23	6.0	30 (Absolute)	0.25	0.47 (@I _{LOAD} =0.25A)	0.090	TO-92/ SOP-8/ TO-263-3L/ TO-220-3L	LP2954, BD3650
LM2940	3.3/ 5.0	Fixed	4.3	30 (Absolute)	1.0	0.40 (@I _{LOAD} =1.0A)	1.0	SOT-223-3L/ TO-220-3L	LM2940, MIC2940, BA0xx
LM2940H	3.3/ 5.0	Fixed	4.3	60 (Absolute)	1.0	0.40 (@I _{LOAD} =1.0A)	1.0	SOT-223/ TO-220	LM2940, MIC2940, BA0xx
LM2941	ADJ	1.24	2.3	30 (Absolute)	1.0	0.40 (@I _{LOAD} =1.0A)	1.0	TO-263-5L	LM2941, MIC2941
LM3710x	ADJ/ 2.5/ 5.0	1.24	2.25	16	1.0	0.47 (@I _{LOAD} =1.0A)	0.70	SOT-223-3L/ SOP-8/ TO-252-5L	LD29080, MIC3910x, MIC3710x, UCC381, UCC281, MC33269
LM37102C	ADJ	1.24	2.5	16	1.0	0.50 (@I _{LOAD} =1.0A)	3.8	SOP-8/ SOP-8PP	MIC37102, MIC39102, TL5209, UCC381, UCC281, MC33269, BA00BCOWFP
LM3910x	ADJ/ 3.3/ 5.0	1.24	2.25	16	1.0	0.41 (@I _{LOAD} =1.0A)	0.70	SOP-8/ SOT-223-3L/ TO-252	LD29080, MIC3910x, MIC3710x, UCC381, UCC281, MC33269, TL5209, TPS73801
LM2915x	ADJ/ 1.8/ 2.5/ 3.3/ 5.0/ 12	1.24	2.25	26	1.5	0.35 (@I _{LOAD} =1.5A)	8	TO-252/ TO-263/ TO-220	LM2940, NCP5915x, NCP565, MIC2915x, BAxxDD0WHFP
LM3930x	ADJ/ 1.8/ 2.5/ 3.3/ 5.0	1.25	2.25	16	3.0	0.40 (@I _{LOAD} =3.0A)	10	TO-263/ TO-220	NCP5930x, NCP5663, MIC3930x,
LM2930x	ADJ/ 1.8/ 2.5/ 3.3/ 5.0/ 12	1.24	2.30	26	3.0	0.37 (@I _{LOAD} =3.0A)	10	TO-263/ TO-220	MIC2930x
LM39502	ADJ	1.25	2.25	16	5.0	0.40 (@I _{LOAD} =5.0A)	15	TO-263/ TO-220	MIC2950x

CMOS ULDO Regulators



Device Name	V _{OUT} [V]	V _{REF} [V]	V _{IN_MIN} [V]	V _{IN_MAX} [V]	I _{OUT_MAX} [A]	V _{DROP_TYP} [V]	I _{Q_TYP} [mA]	PKG	Compatible Parts
TJ9198	0.8 ~ 3.6	Fixed	2.2	5.5	0.3	0.20 (@I _{LOAD} =0.3A)	0.035	DFN1x1-4/ SC-70-5L/ SOT-23-3L/ 5L	LP5907, NCP115, LD390xx, MCP1711, MIC5247, BDxxTD3WG
TJ4303	ADJ	0.6	2.5	6.0	0.3	0.20 (@I _{LOAD} =0.3A)	0.10	SOT-23-5L	TPS73201, CAT6220, LDLC015, MIC5318, MIC5319
LM1108	1.5 ~ 5.0	Fixed	2.5	6.5	0.3	0.3 ~ 0.6 (@I _{LOAD} =0.3A)	0.015	SOT-23-3L/ SOT-89-3L	
LM8805	ADJ/ 1.5 ~ 6.0	1.27	2.5	6.5	0.6	0.6 ~ 1.3 (@I _{LOAD} =0.6A)	0.050	SOT-23-5L/ SOT-89-3L	TLV702xx, TLV757xx, CAT6219, MIC5319, BUxxSD5
TJ1119C/F	1.0/ 1.2/ 1.5/ 1.8/ 2.5/ 2.8/ 3.3	Fixed	2.5	5.5	1.0	0.40 (@I _{LOAD} =1.0A)	0.13	SOT-223-3L/ TO-252-3L	TLV1117LV, LM3940, TC2117, MIC37139
TJ1801	ADJ	0.6	1.6	5.5	1.0	0.25 ~ 0.6 (@I _{LOAD} =1.0A)	0.15	SOP-8PP	LDL112
TJ4310	ADJ	0.6	2.5	5.5	1.0	0.35 (@I _{LOAD} =1.0A)	0.15	SOP-8PP/ SOT-89-5L/ DFN2x3-8	TPS78601, AT6243, LDL112, MIC37102
LD39150	ADJ	0.6	2.5	5.5	1.5	0.28 (@I _{LOAD} =1.5A)	0.20	TO-252-5L	LD39150, MIC39150
TJ2132	ADJ	0.6	1.1	3.6	2.0	0.25 (@I _{LOAD} =2.0A)	0.10	SOP-8PP/ DFN3x3-8	LD49150
TJ4320	ADJ	0.6	2.5	5.5	2.0	0.40 (@I _{LOAD} =2.0A)	0.20	SOP-8PP/ TO-252-5L	TPS79601, TPS78630, LP3965, AT6243, LD39150, MIC37139
TJ4330	ADJ / 3.3	0.6	2.5	5.5	3.0	0.40 (@I _{LOAD} =3.0A)	0.20	SOP-8PP/ TO-252-5L	TPS75801, TPS74401, LP38501, NCP4632, LD39300, MIC37302
TJ2134	ADJ	0.8	1.3	3.6	4.0	0.24 (@I _{LOAD} =4.0A)	0.15	SOP-8PP	TPS7A85, LD49300
TJ2134A	ADJ	0.8	1.3	3.6	4.0	0.24 (@I _{LOAD} =4.0A)	0.15	SOP-8PP	TPS7A85, LD49300

High Voltage DC-DC Converters



60V Operative Non-Synchronous DC/DC Converter (Step-Down Switching Regulator)

Device Name	V _{OUT} [V]	V _{FB} [V]	V _{IN_MAX} [V]	I _{OUT_MAX} [A]	F _{SW} [KHz]	PKG	Compatible Parts
LM2575HV	ADJ/ 3.3/ 5.0/ 12	1.230	60	1.0	52	SOP-8PP/ TO-263-5L/ TO-220-5L	LM2574HV, TL2575HV LM2575HV, L4971, L4976
LM2591HV	ADJ	1.230	60	1.0	150	TO-263-5L/ TO-220TV-5L	LM2591HV
LM2592HV	ADJ	1.230	60	2.0	150	TO-263-5L/ TO-220TV-5L	LM2592HV
LM2576HV	ADJ/ 3.3/ 5.0/ 12/ 15	1.230	60	3.0	52	SOP-8PP/ TO-263-5L/ TO-220-5L /TO-220TV-5L	LM2576HV
LM2596HV	ADJ/ 3.3/ 5.0/ 12/ 15	1.230	60	3.0	150	SOP-8PP/ TO-263-5L/ TO-220-5L	LM2593HV, L7987, L4973

Non-Synchronous DC/DC Converter (Step-Down Switching Regulator)

Device Name	V _{OUT} [V]	V _{FB} [V]	V _{IN_MAX} [V]	I _{OUT_MAX} [A]	F _{SW} [KHz]	PKG	Compatible Parts
LM2575	ADJ/ 3.3/ 5.0/ 12	1.230	40	1.0	52	SOP-8PP/ TO-263-5L/ TO-220-5L	LM2574, TL2575, NCV2575 LM2575, L6902, L5970, MIC4575
LM2576	ADJ/ 3.3/ 5.0/ 12/ 15	1.230	40	3.0	52	SOP-8PP/ TO-263-5L/ TO-220-5L /TO-220TV-5L	LM2576, L5972, MIC4684, BD9G401EFJ-M, BD90620EFJ-C
LM2596	ADJ/ 3.3/ 5.0/ 12/ 15	1.230	40	3.0	150	SOP-8PP/ TO-263-5L/ TO-220-5L /TO-220TV-5L	LM2596, LM2594, A5975, L5987, L5973, MIC4576, BD9701/2
LM2596G	ADJ/ 3.3/ 5.0/ 12/ 15	1.230	40	3.0	150	TO-263-5L	LM2596, LM2594, A5975, L5987, L5973, MIC4576, BD9701/2
LM4576	ADJ/ 3.3/ 5.0/ 12/ 15	1.230	40	3.0	300	SOP-8PP/ TO-263-5L/ TO-220-5L	LM2596, MIC4576, BD9701/2
LM1501AG	ADJ/ 3.3/ 5.0/ 12	1.230	40	5.0	150	TO-263-5L/ TO-220-5L	LM2596, LM2675, MIC4576 A5975, L5973, L4976, MIC4680
LM1501BG	ADJ/ 3.3/ 5.0/ 12	1.230	40	5.0	300	TO-263-5L/ TO-220-5L	LM2596, LM2675, MIC4576 A5975, L5973, L4976, MIC4680

❖ Other Products are described in the Product Catalog

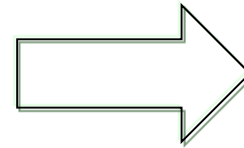
- Voltage References – TL431 & Variants
- General Purpose Linear Regulators & Low Dropout (LDO) Regulators
- Converters & Controllers – MC34063 & Variants
- Interface ICs – RS232 & RS485
- Amplifiers & Comparators
- Darlington Transistor Array
- Logic ICs
- Ground Fault Circuit Interrupter
- Drivers
- TVS

CUSTOM ICs : LDO Variations



Hybrid Circuit / Functional Concept

This block contains several circuit diagrams and a photograph of a PCB. The diagrams include a schematic of a multi-stage transistor amplifier, a detailed schematic of a feedback loop with a compensation network, and a layout diagram showing component placement. The photograph shows a green PCB with various components, with a red circle highlighting a specific area on the board.

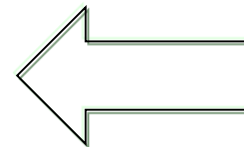


Customized IC Design & Fabrication

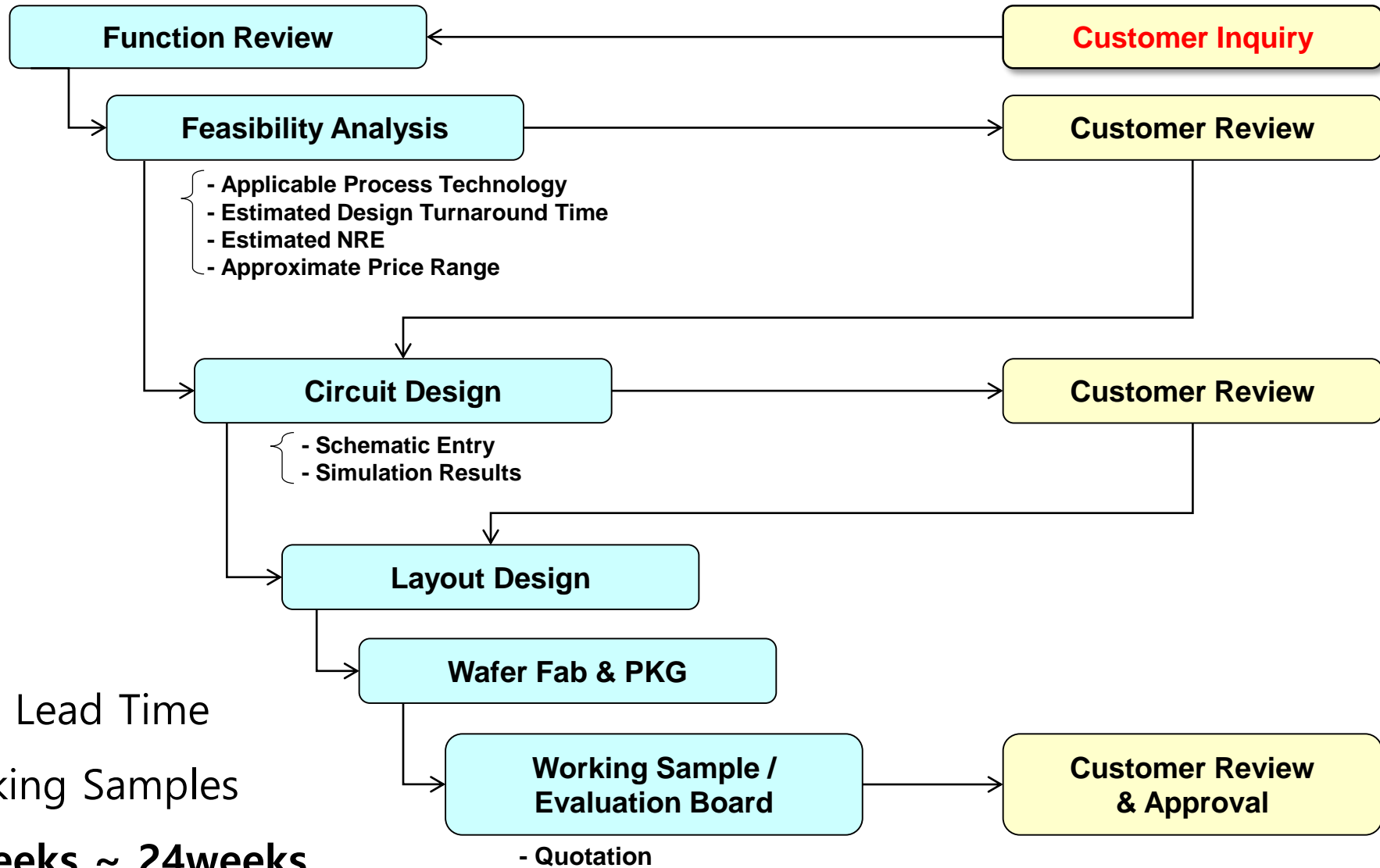
This block contains two screenshots from a CAD software interface. The top screenshot shows a circuit schematic with various components and their interconnections. The bottom screenshot shows a detailed layout of a custom IC die, with various functional blocks and interconnects highlighted in different colors.

Working Sample of Custom IC

This block shows three different types of custom IC packages: a DIP package, a QFN package, and a SOIC package.



BRIEF CUSTOM IC DEVELOPMENT FLOW



* Practical Lead Time
for Working Samples
: 20 weeks ~ 24weeks



Silicon-Proven Primitive IPs for Custom IC Development

for Fast Design Turnaround and Single Run Success

- * Bandgap References – CMOS BGR/ High PSRR CMOS BGR/ Low Voltage CMOS BGR
 - * Low Input Voltage Reference Generator
 - * Ramp Generator/ Multiple Ramp Generator with Adjustable Phase Shift
 - * Current Limiter – Constant Current Limiter/ Foldback Current Limiter/ Cycle by Cycle Current Limiter
 - * Reverse Current Protection for Power Distribution Switches and DC-DC Converters
 - * Internal Fixed Soft Start/ Programmable Soft Start with External Components
 - * Under Voltage Lock Out with/without Deglitch
 - * Over Temperature Protection/ Short Circuit Protection
 - * Power Good Monitor with/without Deglitch
 - * Adjustable Oscillator/ Clock Generator/ Ramp Generator/ Multi-Ramp Generator with Phase shift
 - * Bootstrap using MOS Switch for High Side NMOS Switch for DC-DC Converter
 - * Other Primitives as 2-Stage AMPs/Folded Cascode AMPs/High Speed Comparators/ etc.
- ➔ All IPs for Power ICs are designed, verified and “modularized” for fast design Turnaround. These proven IPs are the core of competitiveness not only for custom IC service but also for high reliability and effective design optimization of catalog products.

DESIGN-WINs : VLDO & ULDO Regulators

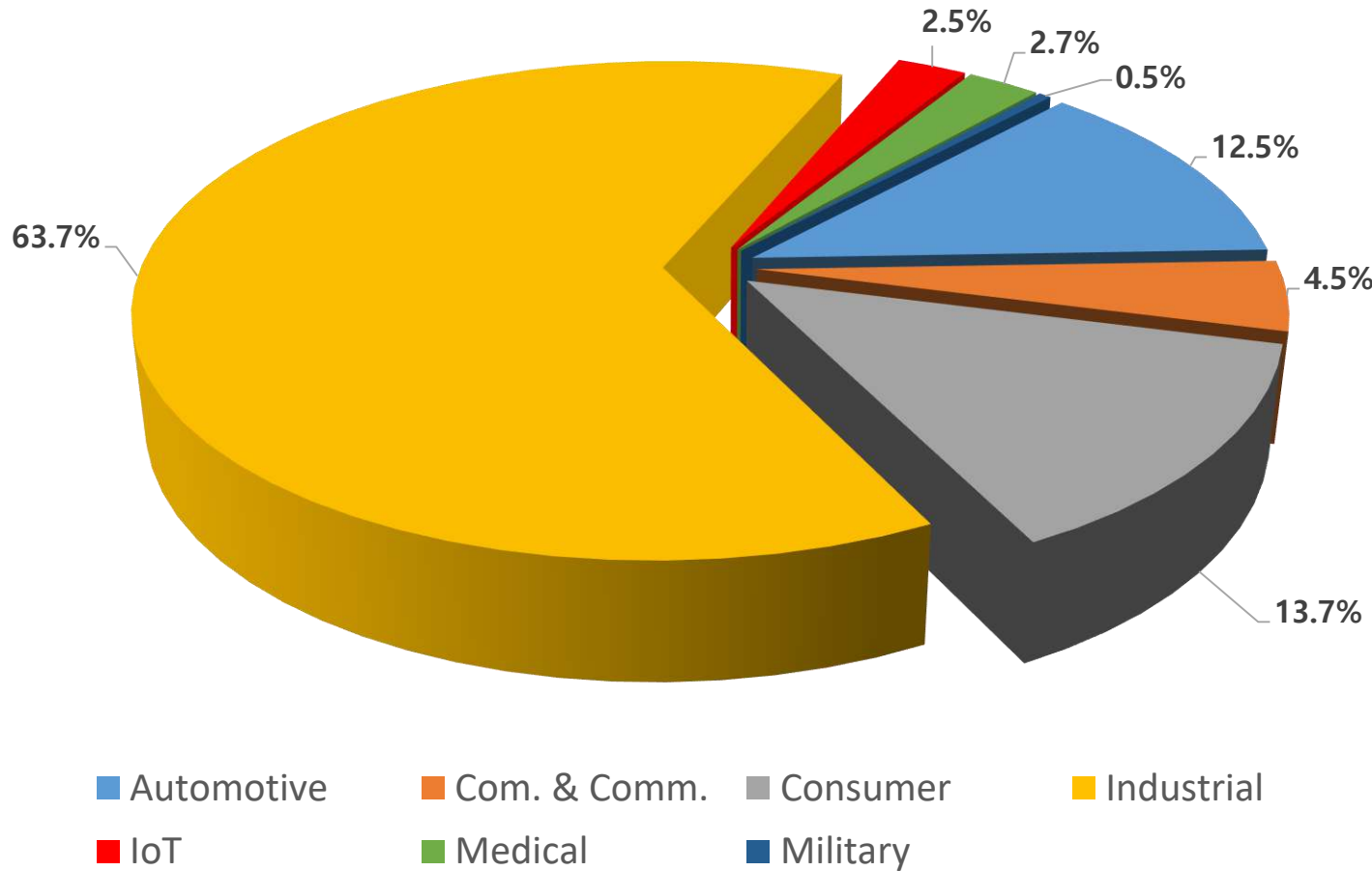
Field	KOREA	HongKong/China	TAIWAN	JAPAN	India/ Asia	EU / US
Consumer	<ul style="list-style-type: none"> - LCD TV - OLED TV - STB - DVD/Blu-ray - Sound bar - Home Theater System - TV SMPS - Wireless Charger - Digital Photo Frame 	<ul style="list-style-type: none"> -LCD TV / SET TOP - DVD Player - Wireless Charger - TV SMPS - Toy - Audio System / Sound Bar - IOT - Air Purifier - Security System - Smart Safe Box - Smart Pet Feeder 	<ul style="list-style-type: none"> - LCD TV - SET TOP BOX - Portable Player - Toy - GPS Tracker - SMPS - Power Supply - Radio 	<ul style="list-style-type: none"> - LCD TV - STB, - Blu-ray -Portable Players - Projector - Air conditioner - Air Purifier - Refrigerator - Audio System - Security Camera 	<ul style="list-style-type: none"> - Air Purifier - Audio Home Theater - Electronic Scale - UPS - IOT Solution 	<ul style="list-style-type: none"> - Mobile GPS Locator - Oven Controller - STB
Industrial	<ul style="list-style-type: none"> - IP Camera - Security System - Projector - LED Display Module - Smart Meters 	<ul style="list-style-type: none"> - Security Camera - Projector - SMPS - Control Panels - Network - E-Meter - Motor Control - Fire Prevent System 	<ul style="list-style-type: none"> - Server - Network - Automatic Control Panel - Motor Controller 	<ul style="list-style-type: none"> - SMPS - PBX - Temperature Controller - Printer - ATM - Meters - FA Robot/Machine - Sewing Machine - Servo Motor - Boiler 	<ul style="list-style-type: none"> - UPS - AVR - POS - Power Supply - Motor Control - Electric Vehicle Supply Equip- (EVSE) - Car Charger 	<ul style="list-style-type: none"> - Wireless Control Device - Vending Machine - Frequency Converter - Fire Prevent System - Emergency Lighting - Measuring Device - Radio Control Device - Access Control System - Lighting Control Equip.
Computer/ Comm.	<ul style="list-style-type: none"> - Monitor - Notebook Computer - Photo Printer 		<ul style="list-style-type: none"> - Monitor - Notebook Computer - Mother-Board - Graphic Card - Router / Network Hub - Desktop Storage 	<ul style="list-style-type: none"> - Network devices - Gateways 	<ul style="list-style-type: none"> - 4G Modem - DCU - GPS Tracker 	<ul style="list-style-type: none"> - Laser Printer
Automotive	<ul style="list-style-type: none"> - Car Stereo (AVN) - Car Navigation - Display Audio - ADAS - Rear Seat Mini Monitor - Wireless Charger 	<ul style="list-style-type: none"> - CAR AVN - Drive Recorder - GPS - ADAS - T-Box - Cluster - Forklift Control 	<ul style="list-style-type: none"> - Car Lighting - Cabin Lighting 	<ul style="list-style-type: none"> - Display Audio - Navigation - Car Stereo - Infotainment System 	<ul style="list-style-type: none"> - LED Lighting 	

DESIGN-WINs : Non-Sync. DC-DC Converters

Field	KOREA	HongKong/China	TAIWAN	JAPAN	India/ Asia	EU / US
Consumer	<ul style="list-style-type: none"> - Air Purifier - Water Purifier - Water Dispenser - De-humidifier - Bidet - LED Lighting - Auto-feeder 	<ul style="list-style-type: none"> - Air conditioner/ Purifier - Water Purifier/ Dispenser - Audio System - Kitchen Appliances - Door lock / Security System - E-Scales / IoT - Audio system - LED lighting - SMPS for Appliances - RC Aircraft - Lawnmower 	<ul style="list-style-type: none"> - Power Supply - SMPS for Home appliances 	<ul style="list-style-type: none"> -SMPS 	<ul style="list-style-type: none"> - IOT Solution - Audio home theater - E-Cycle 	<ul style="list-style-type: none"> - Coffee Machine
Industrial	<ul style="list-style-type: none"> - POS / ATM - Two way radio - Card reader - Measure Equip. - Telegraphic repeater - Medical Equip. - Welding Machine - Inspection Equip. - Access control machine 	<ul style="list-style-type: none"> - Electronic Scale - Measuring Equip. - Medical Equip. - Stage Lighting - Vending Machine - Elevator - Motor controller - Machine Tools - Control Panels - E-Bike - Smart interphone - Solar Power Module - Automatic Doors - Tele-matrix / E-meter 	<ul style="list-style-type: none"> - Controller - Motor Controller - Oxygen supplier for medical Equip. - Automatic controller - Security AI Drive - Fuel Dispenser - Pulse Transformer 	<ul style="list-style-type: none"> - SMPS - Amusement Acc. (Gaming Machine) - Manufacturing Equip. 	<ul style="list-style-type: none"> - Smart Street Light Gateway - Data logger - ECU (Electronic Control Unit) - Welding Machine 	<ul style="list-style-type: none"> - Fire Prevent System - Elevator
Computer/ Comm.	<ul style="list-style-type: none"> - SMPS - Printer 	<ul style="list-style-type: none"> - POE Router/ Network - PC Mainboard - USB Peripherals - Printer / 3D Printer - Scanner 	<ul style="list-style-type: none"> - Server - Desktop Storage - Monitor 		<ul style="list-style-type: none"> - DCU - GPS Tracker 	
Automotive		<ul style="list-style-type: none"> - Cluster - Driver Recorder - GPS - Charger Station - Car Heating System 	<ul style="list-style-type: none"> - Internet Access for Car - Car Charger - LED Lighting - Car Lighting 	<ul style="list-style-type: none"> - Camera Selector 		

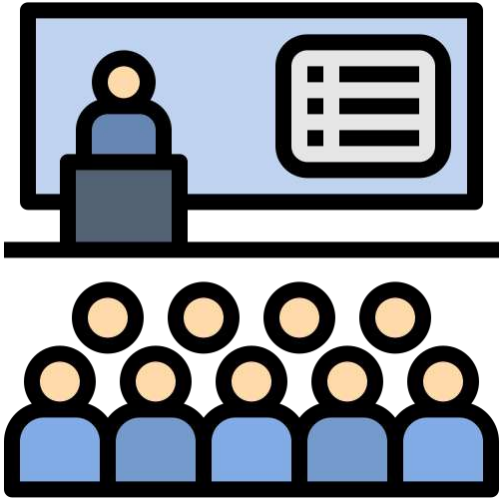
TRENDS of DESIGN-IN PROJECTS

DESIGN-IN PROJECTS (Last 12 months)

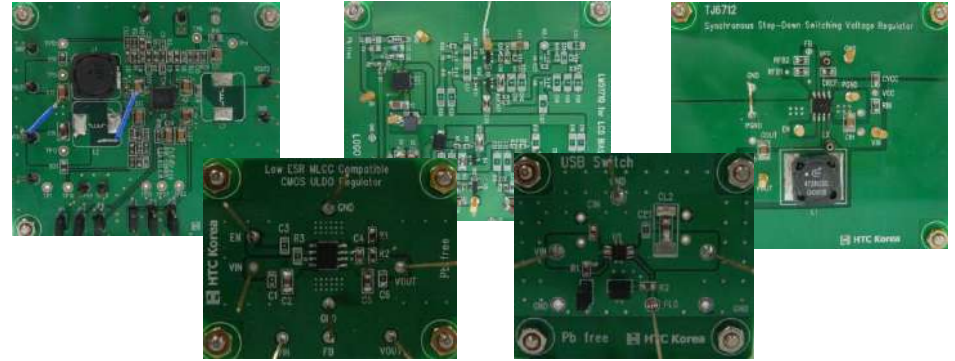


FIELD	MAJOR APPLICATIONS
Automotive	AVN, Cluster, VTS, ADAS, EV Chargers, Display, TPMS, Lighting.
Com. & Comm.	Routers, Servers, Tele-matrix, Gateways, Switch Boards, Telecomm.
Consumer	White Appliances, Black Appliances, Small Appliances, Massagers, Toys.
Industrial	Controllers, Meters, Energy Storages, Motors, Robots, Securities, Machines.
IoT	IoT Platforms, IoT Devices, Smart Home Systems, Smart Speakers.
Medical	Retina Inspectors, Ultrasonic Equipments, Patient Monitors, Medical Equipments.
Military	(cannot be disclosed)

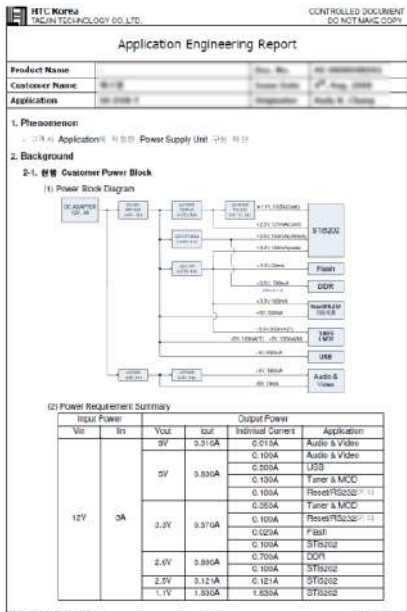
APPLICATION SUPPORT



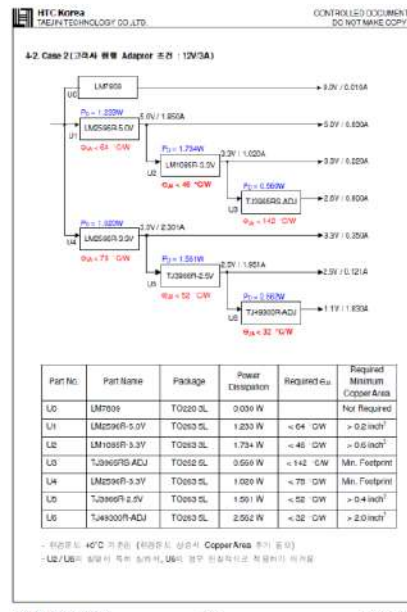
Technical Seminar and Discussion



Support Evaluation Boards



Power Analysis

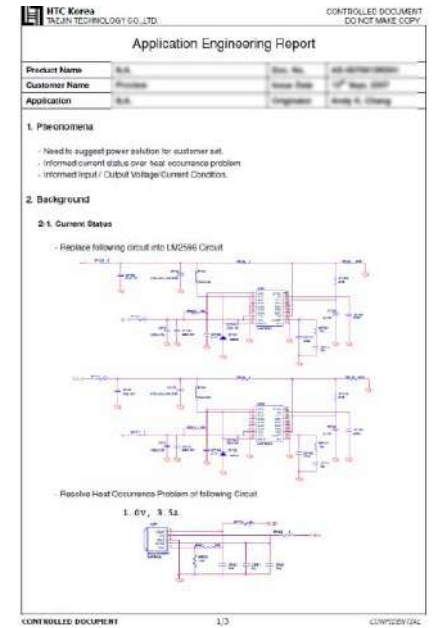


Power Tree Proposal

4-4. 제단원 목표의 특성 비교

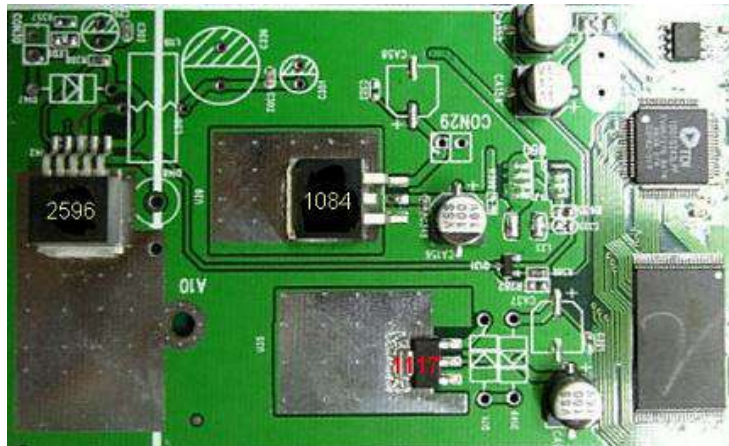
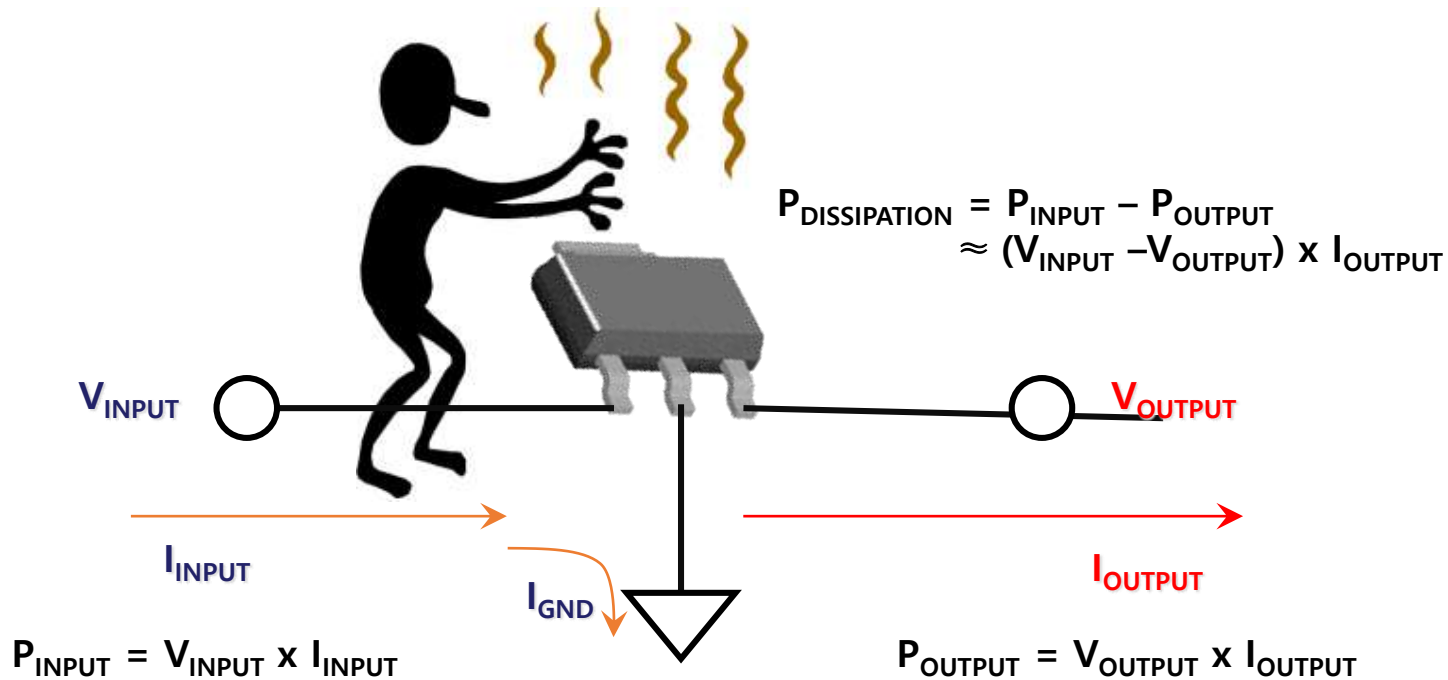
Regulator 종류	CASE 1		CASE 2		CASE 3		Case 4	
	1	2	3	4	5	6	7	8
Case Temp. (°C)	U1	103.2°C	U1	103.2°C	U1	59.8°C	U1	59.8°C
	U2	138.4°C	U2	148.0°C	U2	147.4°C	U2	147.4°C
	U3	81.6°C	U3	139.0°C	U3	94.8°C	U3	94.8°C
	U4	83.5°C	U4	91.8°C	U4	85.5°C	U4	85.0°C
			U5	109.0°C	U5	91.0°C	U5	138.0°C
			U6	109.0°C	U6	103.0°C	U6	103.0°C
입력 전압(V)	Vin = 12.4V I _{max} = 0.85 A		Vin = 12.4V I _{max} = 0.80 A		Vin = 12.4V I _{max} = 0.47 A		Vin = 12.4V I _{max} = 0.47 A	
출력 전압(V)	5.0V / 5A		5.0V / 5A		5.0V / 5A		5.0V / 5A	
출력 전류(A)	1.2V / 5A		1.2V / 5A		1.2V / 5A		1.2V / 5A	
전압 조율	Yes		Yes		Yes		Yes	
유무	Yes		Yes		Yes		Yes	
비고	5V 출력에 Ripple / Load Regulation 등 성능 개선 필요		5V 출력에 Ripple / Load Regulation 등 성능 개선 필요		5V 출력에 Ripple / Load Regulation 등 성능 개선 필요		5V 출력에 Ripple / Load Regulation 등 성능 개선 필요	

Cost-Quality Effective Solution Proposal



System Test & Analysis

THERMAL ANALYSIS



* For cost-effective appropriate component selection and copper plane area design, the thermal analysis is indispensable.

CROSS REFERENCE : CATALOG

CROSS REFERENCE GUIDE

Catalog	TAEJIN	TI	ON-SEMI	ST	MICROCHIP	ROHM	
60V Operative Non-Synchronous DC/DC Converter	LM2575HVDP-xx	LM2574HVM-xx, LM2574HVN-xx, TL2575HV-xxIN		L4971, L4976			
	LM2575SHVR-xx	LM2575HVS-xx, TL2575HV-xxKTT					
	LM2575HVT-xx	LM2575HVT-xx, TL2575HV-xxIKV					
	LM2576HVDP-xx						
	LM2576HVR-xx	LM2576HVS-xx					
	LM2576HVT-xx	LM2576HVT-xx					
	LM2596HVGDP-xx	LM2594HVM-xx, LM2594HVN-xx		L7987L, L4973			
	LM2596HVG-xx	LM2591HVS-xx, LM2592HVS-xx, LM2593HVS-xx					
	LM2596HVG-xx	LM2591HVT-xx, LM2592HVT-xx, LM2593HVT-xx					
	Dual Channel CMOS ULDO Voltage Regulator (MLCC)	LM2C117					
TJ5641/R1							
High Performance Linear Power ICs	TPS761xx	TPS780xDBVR, LP2985A-xxDBV, TPS761xxDBVR, TPS709xxDBVR		LD2981ABMxxTR, LD2985BMMxxR, LD2980ABMxxTR, LDK220Mxx / 320Mxx	MIC5247-xxBM5, MIC5205-xxYM5, MIC5235-3-3YM5		
	TPS73001	TPS73201DBVR, TPS73001DBVR, TPS78101DBVR	CAT6220TDI-GT3	LDLC015MR	MIC5318YD5, MIC5319		
	TPS730xx	LP5907MFX-xx, LP5907SNK-xx, TLV703xx, TLV702xx, TPS721xxDBVR	NCP115ASNxx, LP59020DTPUxx, LD39030DTPUxxR, LD3985MxxR		LDLN023PU/M-xx, LD39020DTPUxx, LD39030DTPUxxR, LD3985MxxR	MIC5323, MCP1711T-xxU/OT, MCP1711T-xxU/SX, MIC5247-xxBM5	BDxxTD3WG
	TPS740xx	TLV702xxDBVR, TLV770xxPDBVR, TLV775xxPDBVR, TPS735xx	CAT6219-xxXTDG, CAT6219ADJTD		MIC5319-xxYD5	BUxxSD5	
	TPS1117LVxx	TLV1117LVxxDCYR, LM3940MP-xx			TC2117-xxVDBTR, MIC37139-xxBS	BDxxASMEFJ-ME2	
	TPS7A8001	TPS7A8001DBR, TPS786xx	CAT6243DCADJ-RKG	LDL112	MIC37102	BDxxCOWEFL, BDxxASWF-E2	
	TPS7A7001	TPS796xxKT, TPS7A7001DDA, TPS78630, LP3965	CAT6243DCADJ-RKG	LD39150	MIC37139		
	TPS7A7002	TPS7A7002DDA, TPS7A7002DOAR, TPS758xx, TPS74401, TPS75701KT, LP38501-TS-ADJ	NCP4632DDTADJ	LD39300	MIC37302		

CROSS REFERENCE GUIDE

Catalog	TAEJIN	TI	ON-SEMI	ST	MICROCHIP	ROHM
High Performance Linear Power ICs	TPS7A4501	TPS7A4501KTR	NCP59150DSADJ, NCV59130DSADJ, NCP57152DSADJ, NCV57152DSADJ			
	TPS75701	TPS75701KTT	NCP59302DSADJ, NCV59302DSADJ, NCP56630SADJ-RKG, NCV56630SADJ-RKG	LD29300P2MTR	MIC29302WU, MIC29302WU	
	TPS75501	TPS75501KTT			MIC29502WU	
	TPS2553D	TPS2553DBVR	NCP380HSNA1		MIC2009YM6, MIC2019YM6	BD2242G
	LP2998	LP2998	NCP51198		MIC5166	
	CMOS ULDO Voltage Regulator (MLCC)	TJ9198	LP5907MFX-xx, LP5907SNK-xx, TLV703xx, TLV702xx, TPS721xxDBVR	NCP115ASNxx, NCP4589DSQxx, NCP4589DSNxx	LDLN023PU/M-xx, LD39020DTPUxx, LD39030DTPUxxR, LD3985MxxR	MIC5323, MCP1711T-xxU/OT, MCP1711T-xxU/SX, MIC5247-xxBM5
TJ4303GFS-xx		TPS73201DBVR, TPS73001DBVR, TPS70101DBVR	CAT6220TDI-GT3	LDLC015MR	MIC5318YD5, MIC5319	
LM1108						
LM805SF5-xx		TLV702xxDBVR, TLV775xxPDBVR, TPS735xx	CAT6219-xxXTDG, CAT6219ADJTD		MIC5319-xxYD5	BUxxSD5
TJ1119C/FGS-xx		TLV1117LVxxDCYR, LM3940MP-xx			TC2117-xxVDBTR, MIC37139-xxBS	BDxxASMEFJ-ME2
TJ1119C/FGS-xx						
TJ1801				LDL112		
TJ4310 Series		TPS786xx	AT6243DCADJ-RKG	LDL112	MIC37102	BDxxCOWEFL, BDxxASWF-E2
LD39150/ADJ				LD39150PT, LD39150DTPxx, LD39150PU	MIC39150, MIC39152WD	
TJ2132 Series				LD49150		
TJ4320 Series	TPS796xxKT, TPS78630, LP3965	AT6243DCADJ-RKG	LD39150	MIC37139		
TJ4330 Series	TPS758xx, TPS74401, TPS75701KTT, LP38501-TS-ADJ	NCP4632DDTADJ	LD39300	MIC37302		
TPS7A7002DP	TPS7A7002DDA, TPS7A7002DOAR			MIC37302WR		
TJ2134/AGDP	TPS7A85		LD49300PTxx			

CROSS REFERENCE : Replacement Guide

* Example of Cross Reference Guide

: When any replacement of an existing competitor's part is required, proper cross reference can be provided.

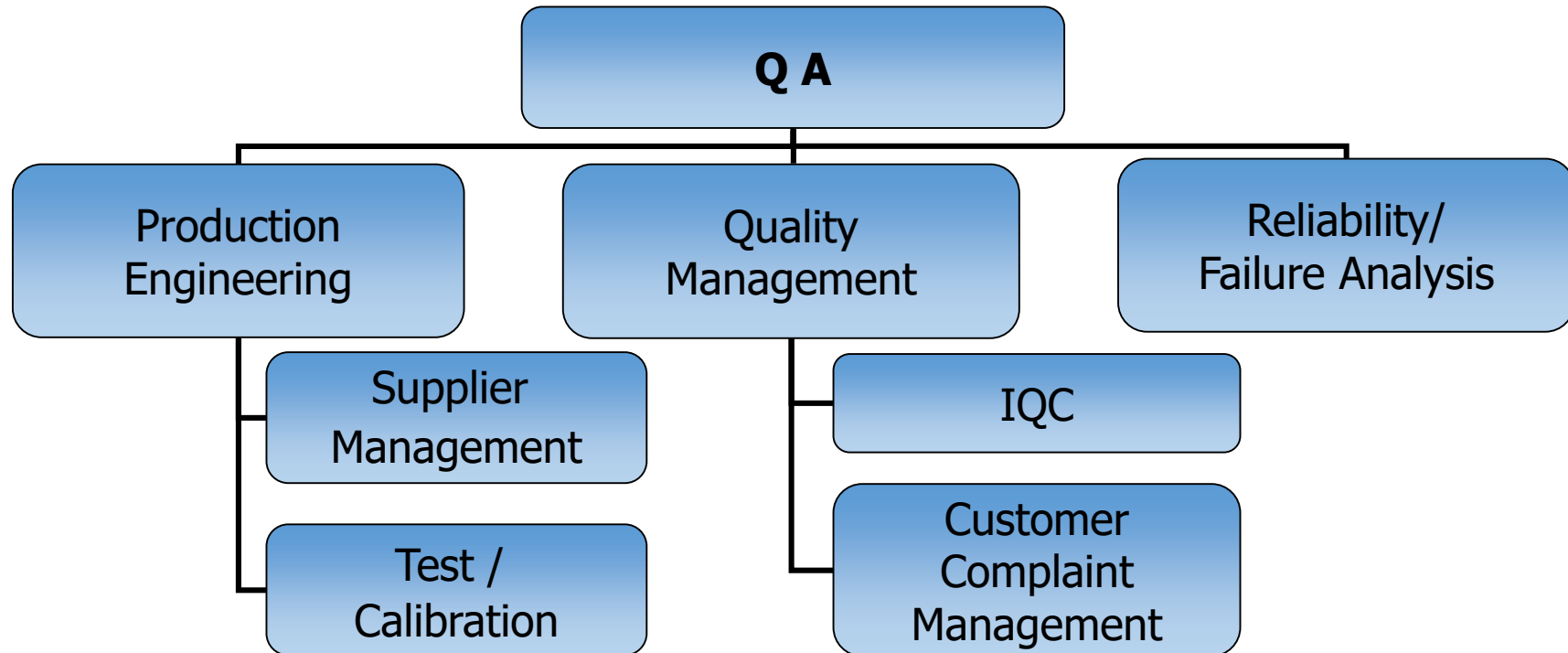
Part Name	Manufacturer	TAEJIN P/N	Replacement Type	Major Difference	Target Device	TAEJIN Device
LT1763CS8-5	ADI	LM37102D	Similar Function	VIN IOUT VOUT	max. 20V 0.5A Fixed 5.0V	max. 16V 1.0A Adjustable 1.24V
NCP563SQ18T1G	onsemi	TJ9198GSF-1.8D	Similar Function	VIN IOUT IQ PKG	max. 6V 80mA 2.5uA SC70-4	max. 5.5V 300mA 35uA SOT-23-3
S-81350HG	ABLIC	LM2950G-5.0	Similar Function	VIN IOUT IQ Pin-Out	max. 15V 60mA 16uA VIN-GND-VOUT	max. 30V 100mA 75uA VOUT-GND-VIN
TAR5S33	Toshiba	TJ5205SF5-3.3	Similar Function	VIN IOUT IQ Pin-Out	max. 15V 200mA 850uA #1: EN, #2: GND, #3: BYP, #4: VOUT, #5: VIN	max. 16V 150mA 120uA #1: VIN, #2: GND, #3: EN, #4: BYP, #5: VOUT
NJM2884ADL3-05	NJRC	LM39101RS-5.0	Conditional Replacement	VIN IOUT Pin-out	10V 0.5A #5: FLG	16V 1.0A #5: NC
LDK120M	ST	TJ4303GSF5-ADJ	Conditional Replacement	VIN IOUT IQ VENH / VENL	1.9V to 5.5V 200mA 30uA 1.2V / 0.4V	2.5V to 6.0V 300mA 100uA 2.0V / 0.4V
MIC5235YM5	Microchip	TJ5205SF5-ADJ	Conditional Replacement	Max. VIN VFB VDROP	24V 1.24V 310mV @ IO=150mA	16V 1.242V 165mV @ IO=150mA
MCP1703T-3302E/MB	Microchip	TJ7533GF	Drop-In Replacement	VIN VDROP IQ	2.7V to 16V 525mV @ IO=250mA 2uA	2.7V to 20V 400mV @ IO=160mA 1uA
LM358DT	ST	TJ358GD	Drop-In Replacement			
LM358DR2G	onsemi	TJ358GD	Drop-In Replacement			
NJM2391DL1-05	NJRC	LM39100RS-5.0	Drop-In Replacement	VIN VDROP	max. 10V 1.1V	max. 16V 0.41V
LM1117MPX-1.8	TI	LM1117GS-1.8	Drop-In Replacement			
TLV1117LV33DCYR	TI	TJ1119CGS-3.3	Drop-In Replacement	VDROP IQ	455mV @IO=1A max. 100uA	400mV @IO=1A max. 200uA
LM2937IMP-3.3/NOPB	TI	LM2940S-3.3	Drop-In Replacement	IOUT VDROP IQ	0.5A 500mV @ IOUT=0.5A 2mA	1.0A 400mV @ IOUT=1.0A 250uA

SIDE BY SIDE COMPARISON TABLE



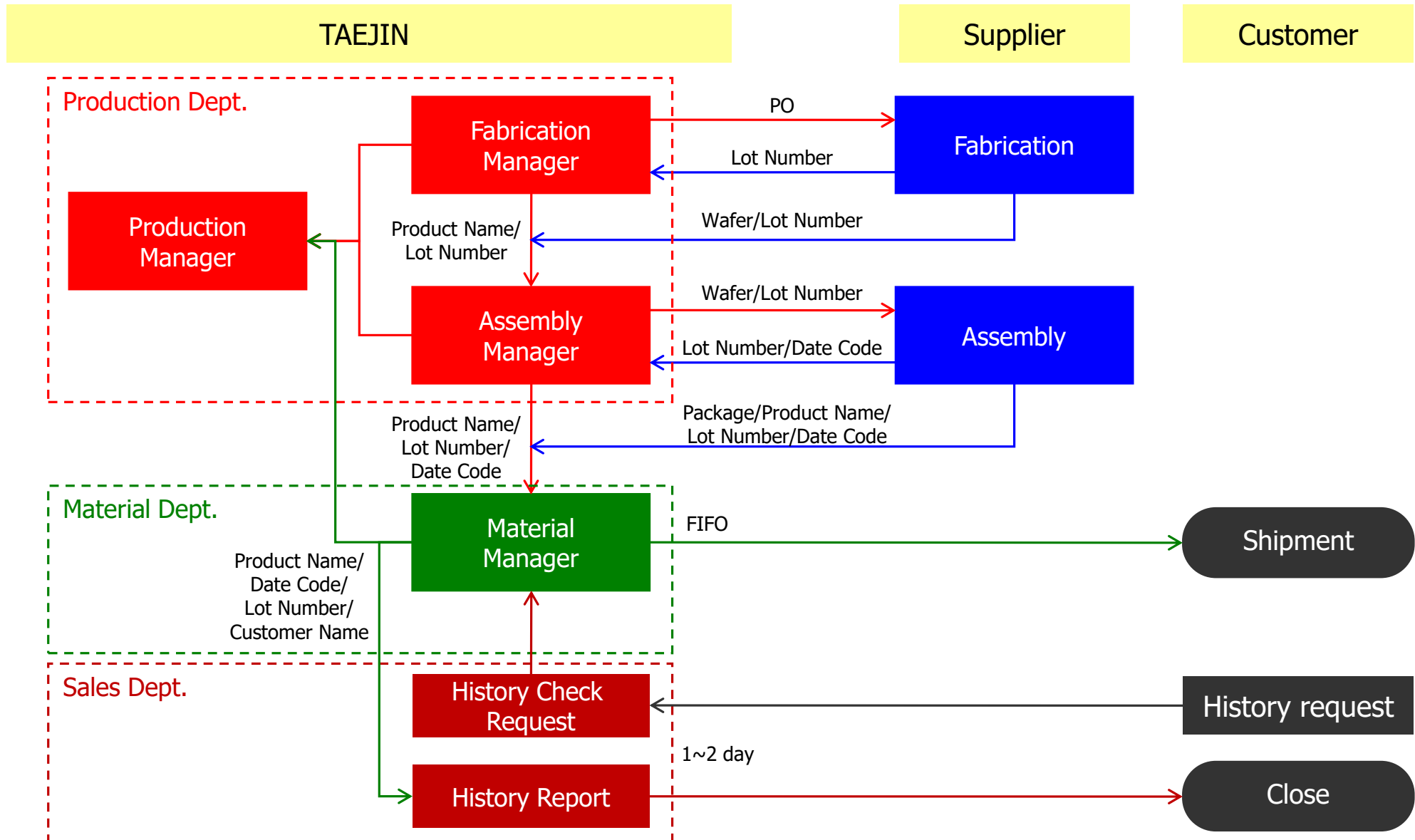
PARAMETER (@25°C)	SYMBOL	TI	TAEJIN Technology
		TPS7A7002DDA	TPS7A7002DP
Datasheet Name (Specific Part No.)		TPS7A7002 (TPS7A7002DDA)	TPS7A7002 (TPS7A7002DP)
Input Voltage	VIN	1.425 V to 6.5 V	2.5 V to 5.5 V
Output Current	IOUT	3.0 A	3.0 A
Output Voltage Type		Adjustable	Adjustable
Feedback Voltage	VFB	0.5 V ± 2.0%	0.6 V ± 2.0%
Line Regulation	LNR	typ. 0.2 %/V	typ. 0.25 %/V
Load Regulation	LDR	typ. 0.7475 %	typ. 0.20 %
Dropout Voltage	VDROP	max. 600 mV	max. 500 mV
Quiescent Current	IQ	max. 3.0 mA	max. 0.3 mA
Current Limit	ICL	min. 3.36 A	typ. 5.3 A
Enable Voltage	VENH/ VENL	1.1 V / 0.5 V	2.0 V / 0.4 V
EN Pin Current	IEN	max. 0.2 uA	typ. 0.1 uA
Thermal Shutdown Temperature	TSD	160 °C / 140 °C	165 °C / 145 °C
Minimum Capacitance		Input 1.0 uF / Output 4.7 uF	Input 10 uF / Output 10 uF
Package		SO-8 PowerPAD	SOP-8PP
Pin Configuration			<p style="text-align: center;">(P2P)</p>
Remark			- Conditional P2P

Quality Assurance Department & Duties

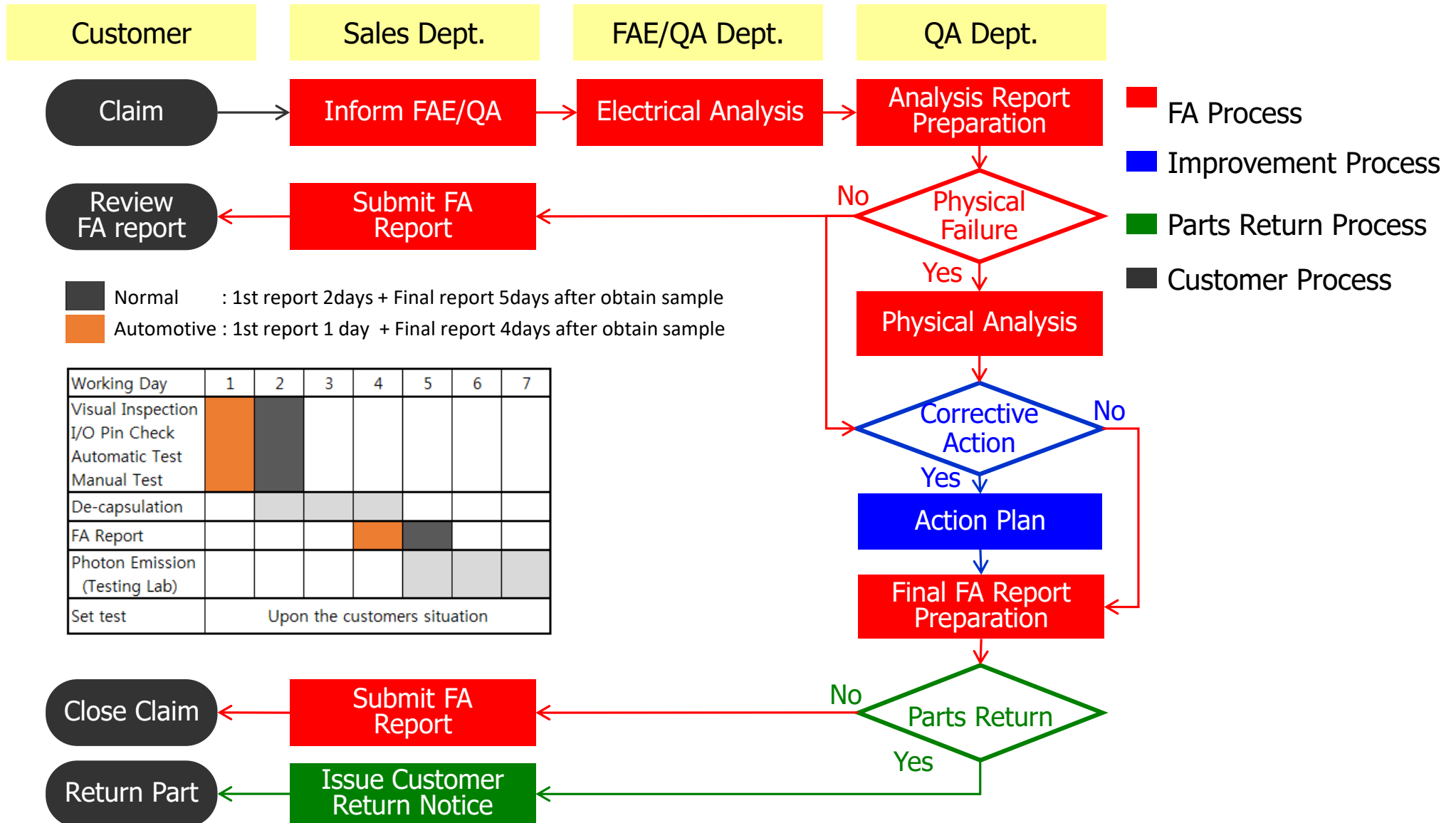


- Duties
 - Overall management of production processes
 - Issue factory standard, engineering specifications and setup test system
 - External and Internal audit over production processes
 - Issue technical datasheet
 - Quality Control
 - Quality Assurance Test
 - Documentation and Data Record Keeping

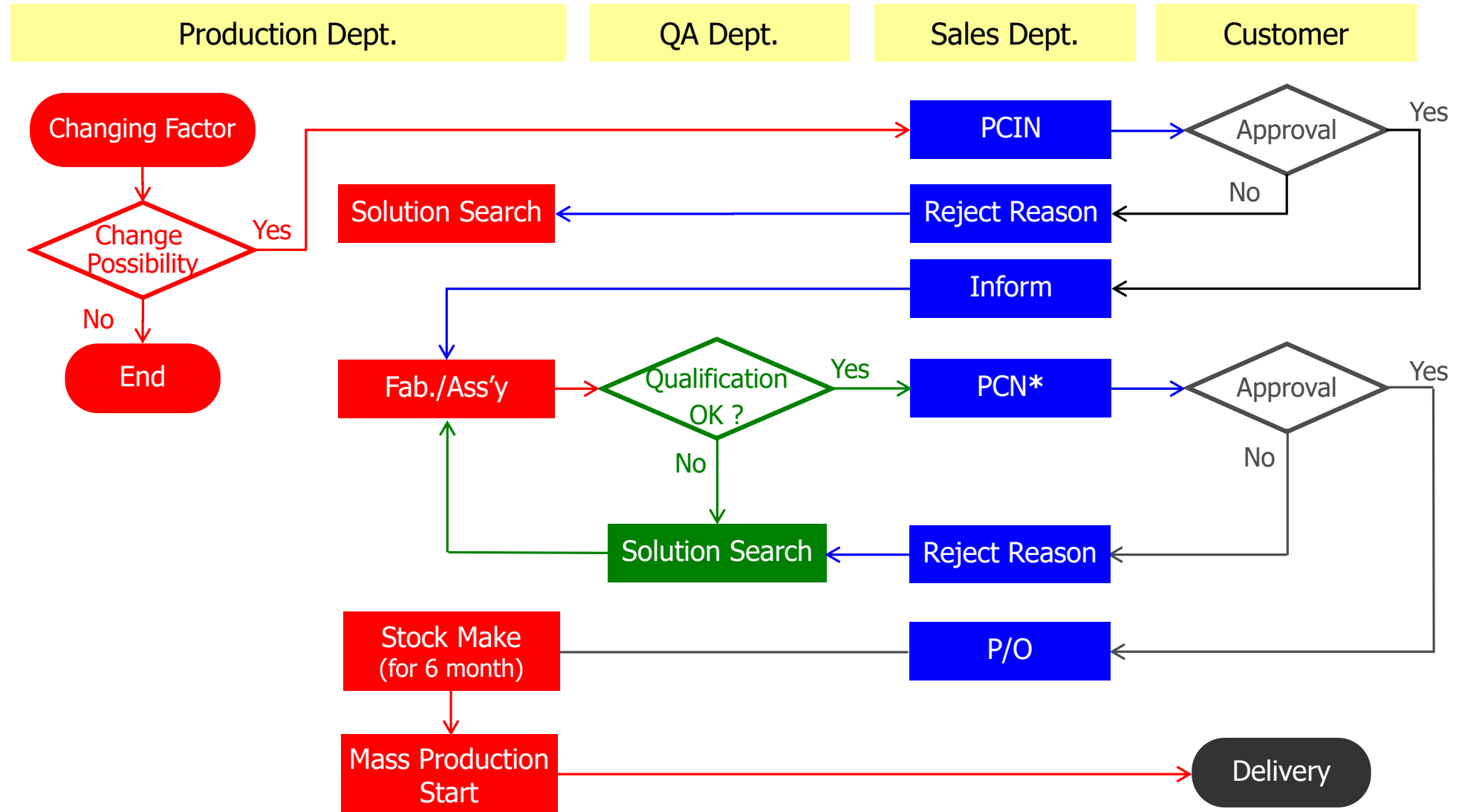
Traceability Management Flow



Customer Complaint Handling Flow



Product Change Management Flow



* Remark : Inform to customers before 6 months about the Change.



THANK YOU.