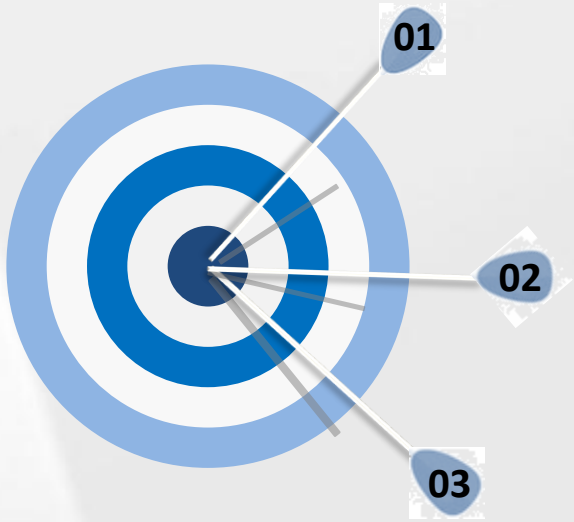


Analog IC &
Discrete Device

Logic & Analog Product Introduction

August, 2026

Logic & Analog Product Introduction



1 74-series Logic IC

- Logic Gates
- Flip-flop/Latch
- Shift Register
- Mux/de-mux
- Transceiver
- Analog Switch

2 Regulator & Photo-coupler

- Linear Regulator
- Switching Regulator
- PWM Control
- Photo-coupler



3 Analog & Interface IC

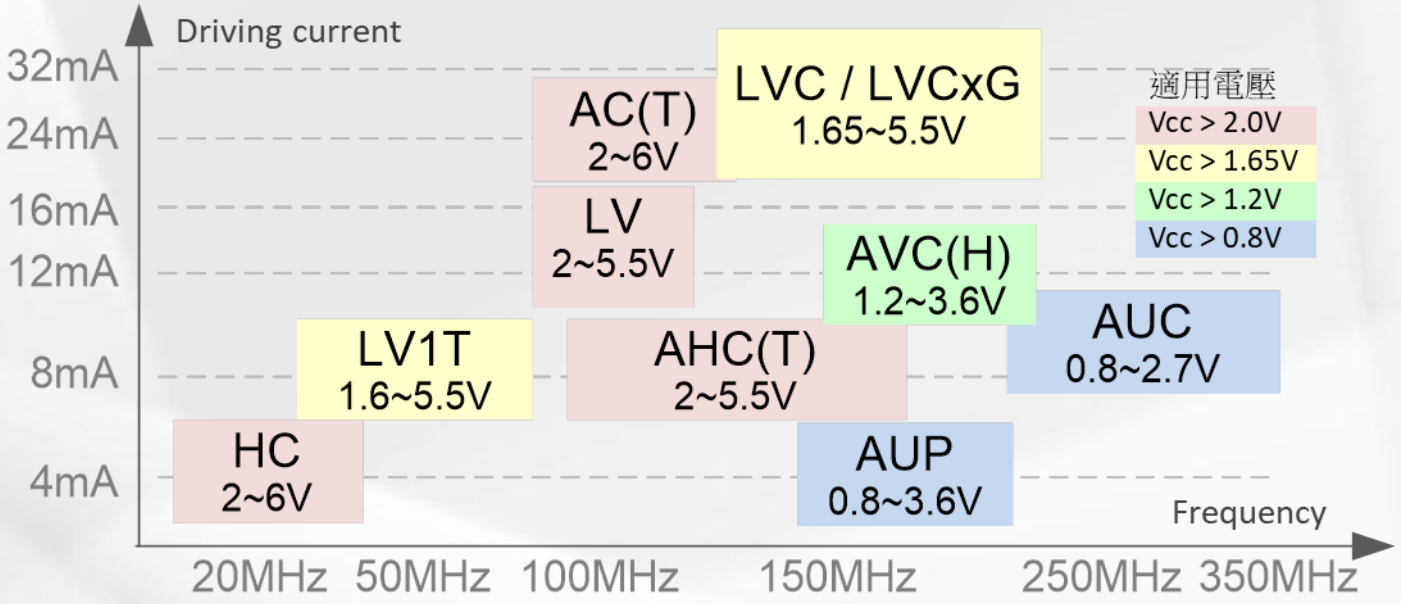
- Op Amplifier
- Voltage Comparator
- Hall Sensor IC
- Motor Driver
- Voltage Detection
- Bus Interface

74-series Logic IC

U74LVC1G126

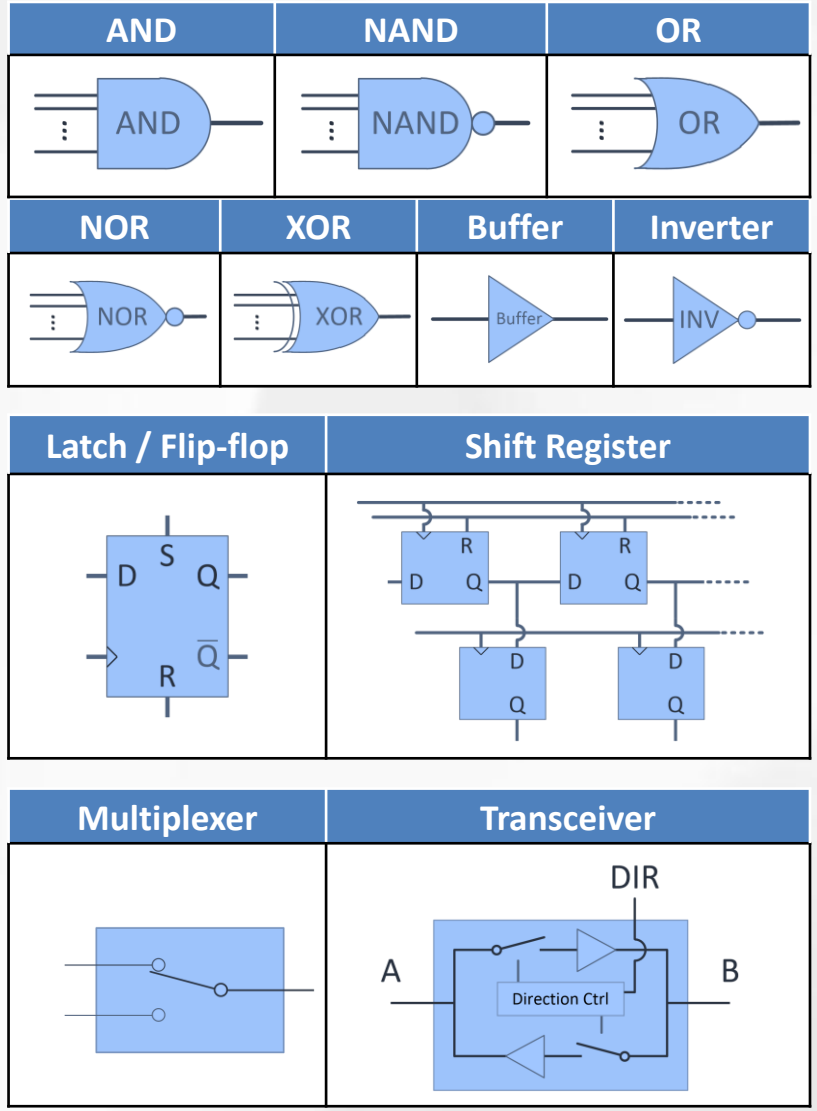
Items around 1000

UTC 74 Series	HC/HCT: High Speed AC/ACT/AHC/AHCT: Advanced High Speed LV/LVC/LCX: Low Power Voltage AUP/AUC/AVC: Advanced Ultra-low Power	1 - Single 2 - Dual 3 – Triple G - Gate T - Translator	Function: Gate Latch Flip-flop …..



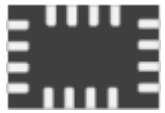
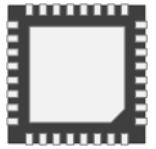
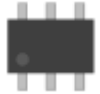
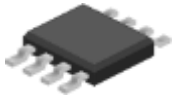
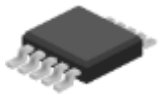
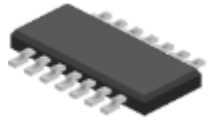
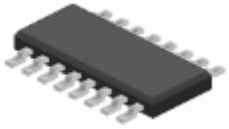
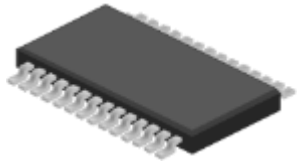
APP Logic Operation, Control, Signal Processing & Interface Conversion.

■ Major Logic Function & Symbols :



74-series Logic IC

■ **Package Options for Logic Families :**

Pin#	4	5	6	8	10	12	14	16	18~48
DFN / QFN	 DFN0808		 DFN1010 DFN1410 DFN14510	 DFN1410 DFN2010 DFN2030	 QFN(1.8x1.4) QFN(1.5×2.0)	 QFN(1.7x2.0)	 QFN(2.5x3.0) QFN(3.5x3.5)	 QFN(1.8x2.6) QFN(3.5x2.5) QFN(3x3)	 QFN-20(3x3) QFN-20(4.5x2.5) QFN-24(4x4) QFN-32(5x5)
SOT	 SOT-143 SOT-343	 SOT-23-5 SOT-353 SOT-553	 SOT-23-6 SOT-363 SOT-563	 SOT-23-8					
SOP/ TSSOP/ MSOP/ SSOP	-	-	-	 SOP-8 TSSOP-8 MSOP-8 VSSOP-8	 MSOP-10	-	 SOP-14 TSSOP-14	 SOP-16 SOP-16N SOP-16W TSSOP-16 SSOP-16 SSOP-16N	 SOP-18 TSSOP-18 SOP-20 TSSOP-20 SSOP-20N SOP-24 TSSOP-24 SSOP-24 SOP-28 TSSOP-28 SSOP-28 TSSOP-48

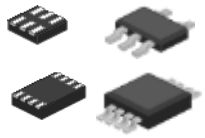
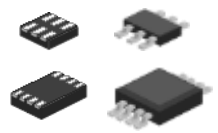
74-series Logic IC

■ Logic Gate 74-series Family :

Function	Pins	Gate	Feature	LVC (1.65~5.5V)	AC (2~6V)	ACT (4.5~5.5V)	AHC (2~5.5V)	AHCT (4.5~5.5V)	HC (2~6V)	HCT (4.5~5.5V)
2-input AND	14	4		U74LVC08A	U74AC08	U74ACT08	U74AHC08	U74AHCT08	U74HC08	U74HCT08
	14	4	Open-drain output	U74LVC09A						
4-input AND	14	2					U74AHC21		U74HC21	U74HCT21
2-input NAND	14	4		U74LV00	U74AC00	U74ACT00	U74AHC00	U74AHCT00	U74HC00	U74HCT00
	14	4	Schmitt-trigger input				U74AHC132	U74AHCT132		
4-input NAND	14	2					U74AHC20		U74HC20	U74HCT20
2-input OR	14	4			U74AC32	U74ACT32	U74AHC32	U74AHCT32	U74HC32	
2-input NOR	14	4		U74LVC02A	U74AC02	U74ACT02	U74AHC02	U74AHCT02	U74HC02	
2-input XOR	14	4		U74LVC86A	U74AC86	U74ACT86	U74AHC86	U74AHCT86	U74HC86	
Buffer (Y=A) 	14	6	Open-drain output	U74LVC07A			U74AHC07		U74HC07	
	14	6	Schmitt-trigger input	U74LVC17A			U74AHC17			
	14	6		U74LVC34A			U74AHC34	U74AHCT34		U74HCT34
	14	4	EN#, Tri-state output	U74LVC125A		U74ACT125	U74AHC125	U74AHCT125		U74HCT125
	14	4	EN, Tri-state output	U74LVC126A			U74AHC126	U74AHCT126		
	20	8	EN+EN#, Tri-state output	U74LVC241						
	20	8	EN#, Tri-state output	U74LVC244	U74AC244	U74ACT244			U74HC244	
	20	8	EN#, Tri-state output	U74LVC541			U74AHC541		U74HC541	U74HCT541
Inverter (Y=A#) 	14	6		U74LVC04A	U74AC04	U74ACT04	U74AHC04		U74HC04	U74HCT04
	14	6	Open-drain output	U74LVC06A			U74AHC06			
	14	6	Schmitt-trigger input	U74LVC14A	U74AC14	U74ACT14	U74AHC14	U74AHCT14	U74HC14	U74HCT14B
	20	8	EN#, Tri-state output	U74LVC240	U74AC240	U74ACT240			U74HC240	
	20	8	EN#, Tri-state output	U74LVC540					U74HC540	U74HCT540
	14	6	Input 15V-rated						U74HC4049	

74-series Logic IC

■ Little Logic 74-series :

Function	Pins	Gate	Feature	LVC (1.65~5.5V)/LV1T	AUP (0.8~3.6V)	AUC (0.8~2.7V)	AHC (2~5.5V)	AHCT (4.5~5.5V)	HC (2~6V)
3-input AND	6	1		U74LVC1G11					
2-input NAND 	5	1		U74LVC1G00	U74AUP1G00	U74AUC1G00	U74AHC1G00	U74AHCT1G00	
	8	2		U74LVC2G00					U74HC2G00
	5	1	Open-drain output		U74AUP1G38				
	8	2		U74LVC2G38					
	5	1	Schmitt-trigger input	U74LVC1G132			U74AHC1G132		
	8	2		U74LVC2G132					
3-input NAND	6	1		U74LVC1G10					
2-input OR	5	1		U74LVC1G32	U74AUP1G32	U74AUC1G32	U74AHC1G32	U74AHCT1G32	
	8	2		U74LVC2G32			U74AHC2G32		U74HC2G32
	5	1	1.8V logic / TTL input	U74LV1T32			U74VHC1GT32		
3-input OR	6	1		U74LVC1G332					
2-input NOR	5	1		U74LVC1G02	U74AUP1G02	U74AUC1G02	U74AHC1G02	U74AHCT1G02	
	8	2		U74LVC2G02			U74AHC2G02		U74HC2G02
3-input NOR	6	1		U74LVC1G27					
2-input XOR	5	1		U74LVC1G86	U74AUP1G86	U74AUC1G86	U74AHC1G86	U74AHCT1G86	
	8	2		U74LVC2G86					
3-input XOR	6	1		U74LVC1G386					
Multi-function 	6	1	Y=(A•B)+C	U74LVC1G0832					
	6	1	Y=(A+B)•C	U74LVC1G3208					
	6	1	Schmitt-trigger input: Y=B•C+A#•C#	U74LVC1G57	U74AUP1G57				
	6	1	Schmitt-trigger input: 1.8V input		U74AUP1T57				
	6	1	Schmitt-trigger input: Y=(B#+C#) •(A+C)	U74LVC1G58					
	6	1	Schmitt-trigger input: Y=A•C+B•C#	U74LVC1G97	U74AUP1G97				
	8	1	Schmitt-trigger input: 4-input, EN#, Tri-output	U74LVC1G99					

74-series Logic IC

■ Little Logic 74-series :

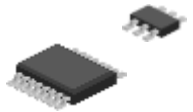
Function	Pins	Gate	In/Out/EN	AUP/AUP1T	AUC (0.8~2.7V)	LV1T (1.6~5.5V)	LVC (1.65~5.5V)	AHC (2~5.5V)	AHCT (4.5~5.5V)	HC (2~6V)	HCT (4.5~5.5V)
Logic Buffer    	4~6	1		U74AUP1T34		U74LV1T34	U74LVC1G34	U74AHC1G34			
	6	2					U74LVC2G34				
	8	3					U74LVC3G34	U74AHC3G34	U74AHCT3G34		U74HCT3G34
	4~6	1	Open-drain output	U74AUP1G07			U74LVC1G07	U74AHC1G07			
	6	2					U74LVC2G07				
	8	3					U74LVC3G07				U74HCT3G07
	4~6	1	Schmitt-trigger input				U74LVC1G17				
	6	2					U74LVC2G17				
	8	3					U74LVC3G17	U74AHC3G17	U74AHCT3G17		
	5	1	EN# Tri-state	U74AUP1G125E	U74AUC125		U74LVC1G125	U74AHC1G125	U74AHCT1G125		
	8	2			U74AUC1G125		U74LVC2G125	U74AHC2G125		U74HC2G125	
	5	1	EN Tri-state	U74AUP1G126	U74AUC1G126	U74LV1T126	U74LVC1G126	U74AHC1G126	U74AHCT1G126		
	8	2					U74LVC2G126	U74AHC2G126			
	8	2	EN+EN#				U74LVC2G241				
Logic Inverter    	4~6	1		U74AUP1G04		U74LV1T04	U74LVC1G(U)04	U74AHC1G04	U74AHCT1G04		
	6	2					U74LVC2G(U)04				
	8	3					U74LVC3G04	U74AHC3G04	U74AHCT3G04		U74HCT3G04
	4~6	1	Open-drain output	U74AUP1G06			U74LVC1G06	U74AHC1G06		U74HC1G06	
	6	2					U74LVC2G06				
	8	3					U74LVC3G06	U74AHC3G06	U74AHCT3G06		U74HCT3G06
	4~6	1	Schmitt-trigger input	U74AUP1G14			U74LVC1G14	U74AHC1G14	U74AHCT1G14		
	6	2					U74LVC2G14				
	8	3					U74LV3G14	U74AHC3G14	U74AHCT3G14		U74HCT3G14
	5	1	EN# Tri-state				U74LVC1G240				
	8	2					U74LVC2G240				

74-series Logic IC

■ Latch / Flip-Flop / Shift Register & Miscellaneous :

Function	AUP	LVC (1.65~5.5V)	AC/AHC	AHCT (4.5~5.5V)	HC (2~6V)	HCT (4.5~5.5V)
D-type latch		U74LVC373	U74AHC373	U74AHCT373	U74HC373	U74HCT373
		U74LVC1G373				
		U74LVC573	U74AHC573	U74HC573		U74HCT573
		U74LVC563			U74HC563	U74HCT563
D-type flip-flop    					U74HC374B	
					U74HC574E	
		U74LVC74A	U74AC74		U74HC74	
	U74AUP1G74	U74LVC1G74	U74AHC1G74			
		U74LVC1G79	U74AHC1G79			
		U74LVC1G175				
		U74LVC273			U74HC273	U74HCT273
		U74LVC374	U74AHC374	U74AHCT374	U74HC374	U74HCT374
		U74LVC1G374				
			U74AHC377		U74HC377	
		U74LVC574	U74AHC574		U74HC574	U74HCT574
		U74LVC1G80				
					U74HC564	U74HCT564
J-K Flip-flop					U74HC73	U74HCT73

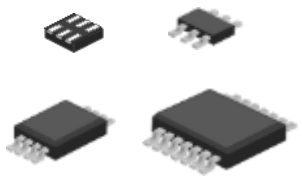
Function	LV/AHC (2~5.5V)	HC (2~6V)	HCT (4.5~5.5V)
Shift Register		U74HC594	
	U74AHC595	U74HC595A	U74HCT595
		U74HC4094	U74HCT4094
Serial / Parallel Conversion	U74LV164 U74AHC164	U74HC164	U74HCT164
		U74HC165	U74HCT165
Counter		U74HC590	

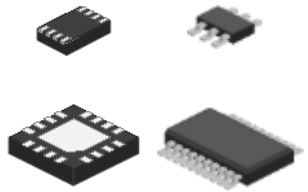
Function	LVC (1.65~5.5V)	HC (2~6V)	HCT (4.5~5.5V)
Coder / Decoder 	U74LVC1G19		
	U74LVC1G139		
	U74LVC138	U74HC138	U74HCT138
		U74HC238	
		U74HC148	

Function	Part Number
Monostable Vibrator	U74HC123
Phase Locked Loop Circuit	U74HC4046A
	U74HCT7046

74-series Logic IC

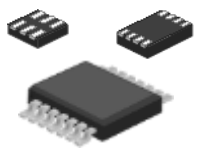
■ Digital multiplexer / De-multiplexer / Transceiver :

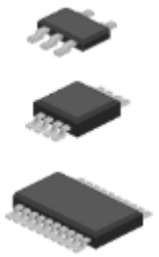
Function	Pin	Gate	AUP (0.8~3.6V)	LVC (1.65~5.5V)	AHC (2~5.5V)	AHCT (4.5~5.5V)	HC (2~6V)
Multiplexer / Demultiplexer 	6	1		U74LVC1G18			
	16	4		U74LVC157	U74AHC157	U74AHCT157	U74HC157
	6	1	U74AUP1T157	U74LVC1G157			
	16	4		U74LVC257			
	16	4			U74AHC158	U74AHCT158	
	6	1		U74LVC1G158			
	16	4		U74LVC258			
	8	2		U74LVC2G158			
	8	2		U74LVC2G157			

Function	Pin	Gate	AVC (1.2~3.6V)	AVCH (Bus-hold)	LVC (1.65~5.5V)	AHC (2~5.5V)	AHCT (4.5~5.5V)	HC (2~6V)
Transceiver 	6	1	U74AVC1T45		U74LVC1T45			
	8	2	U74AVC2T45	U74AVCH2T45	U74LVC2T45			
	14	2	U74AVC2T245					
	16	4	U74AVC4T245 U74AVC4TD245	U74AVCH4T245				
	20	8			U74LVC245	U74AHC245	U74HC245	U74HCT245
	24	8			U74LVC4245			
	16	4	U74AVC4T774					
	20	8			U74LVC640		U74HC640	U74HCT640

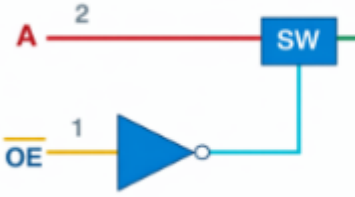
74-series Logic IC

■ Analog switch / Multiplexer :

Function	Pins	Gate	Mux	US5C	CBTLV / CB3Q (2.3~3.6V)	CBT (4.5~5.5V)	LVC (1.65~5.5V)	LVX (2~6V)	HC (2~6V)
Analog Multiplexer 	6	1	1:2				U74LVC1G3157		
	10	2	1:2				U74LVC2G3157		
	16	3	1:2					U74LVX4053	U74HC4053
	16	4	1:2	US5C3257	U74CB3Q3257 U74CBTLV3257	U74CBT3257 (C)			
	8	1	1:3	US5C3309					
	16	2	1:4		U74CBTLV3253	U74CBT3253 (C)		U74LVX4052	U74HC4052
	16	1	1:8		U74CBTLV3251	U74CBT3251 (C)		U74LVX4051	U74HC4051
	16		1:8						U74HC4851

Function	Pins	Gate	US5C	CBTLV / CB3Q	CBT (4.5~5.5V)
Analog Switch 	5	1		U74CBTLV1G125	U74CBT1G125
	8	2			U74CBT2G125
	14	4	US5C3125	U74CBTLV3125	
	14	4		U74CBTLV3126	U74CBT3126
	20	8		U74CB3Q3245 U74CBTLV3245	
	8	2	US5C3305	U74CB3Q3305	
	8	2	US5C3306	U74CB3Q3306	U74CBT3306
	5	1			U74CBT1G384
	5	1			U74CBT1G385

Function	Pins	Gate	LVC (1.65~5.5V)	AHC/AHCT	HC/HCT
Analog Switch 	5	1	U74LVC1G66	U74AHC1G66 U74AHCT1G66	U74HC1G66 U74HCT1G66
	8	2	U74LVC2G66		
	14	4		U74AHC4066 U74AHCT4066	U74HC4066 U74HCT4066



U74CBTLV1G12

INPUT $\overline{OE}$	FUNCTION
L	A port = B port
H	Disconnect

2 Regulator & Photo-coupler

- Linear Regulator – Standard regulator / low-quiescent LDO / DDR bus termination / shunt voltage reference
- Switching Regulator – DC/DC (step-down / step-up / inverting)
  – AC/DC (PSR / SSR / QR / non-isolated)
- PWM Control – voltage mode / current mode
- Photo-coupler

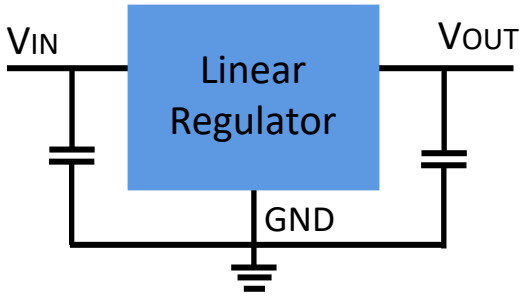


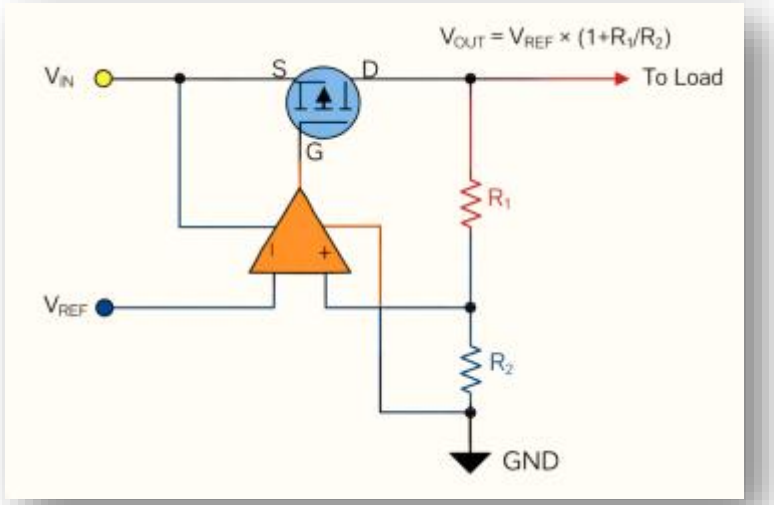


Low/Mid-voltage Linear Regulator

Linear Regulator (500+)

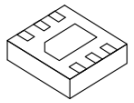
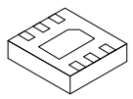
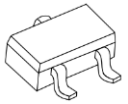
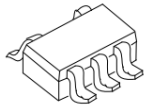
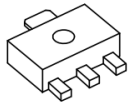
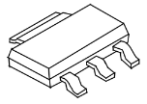
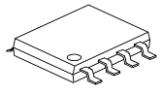
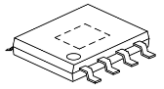
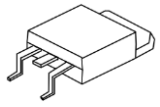
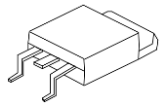
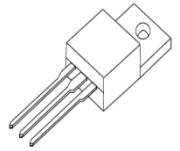
- Standard Linear Regulator
- CMOS Linear Regulator, Low IQ
- CMOS Linear Regulator, Ultra Low IQ







Package Expansion (Small Package to High Power) :

DFN1010	DFN1616	DFN2020	SOT-23	SOT-25	SOT-89	SOT-223	SOP-8	HSOP	TO-252	TO-263	TO-220/F
1.0 x 1.0	1.6 x 1.6	2 x2	2.9 x 2.4	2.9 x 2.8	4.5 x 4.2	6.5 x 7.0	4.9 x 6	4.9 x 6.0	6.5 x 9.9	10.2 x 15	10 x 28.0
											

unit: mm

Standard Linear Regulator

■ Main Product :

Part Number	Vin (MAX)	Vin (MIN)	Vout (MAX)	Vout (MIN)	Output Method		Iout (MAX)	IQ	PSRR (TYP)	SOT-23	SOT-25	SOT-89	SOP-8	SOT-223	TO-252	TO-263	TO-220/F
	[V]	[V]	[V]	[V]	Fixed	Adj.	[A]	[mA]	[dB]								
UZ1086	7.5	2.8	5	1.2	✓	✓	1.5	13	72 @ 120Hz					●	●	●	●
LD1117/A	15	2.7	5	1.25	✓	✓	0.8/1	10	75 @ 120Hz		●	●	●	●	●	●	●
UR133/A	12	2.65	5	1.25	✓	✓	0.3/0.5	5	-	●		●		●			
UR233	12	2.75	5	1.25	✓	✓	0.8	10	72 @ 120Hz			●	●	●	●	●	
UZ1084	15	2.75	5	1.25	✓	✓	5	13	-						●	●	●
UZ1085	18	2.75	5	1.25	✓	✓	3	13	72 @ 120Hz							●	●
78LXX-Series	40	7	24	5	✓		0.1/0.2	6.5	60 @ 120Hz	●	●	●	●	●			
LM317-Series	40	-	-	1.25	✓		0.1/0.5/1/1.5	-	-			●	●	●	●	●	●
78DXX-Series	40	7	24	5	✓		0.5/1/1.5	8	80 @ 120Hz			●	●	●	●	●	●
LM78XX-Series	40	7	24	5	✓		1/1.5	8	80 @ 120Hz						●		●
79LXX	-35	-7	-18	-5	✓		0.1	6	71 @ 120Hz			●	●				
79DXX-Series	-40	-7	-24	-5	✓		0.5/1/1.5	8	60 @ 120Hz			●			●		
LM79XX-Series	-35	-7	-24	-5	✓		1/1.5	6	60 @ 120Hz								●

Low-quiescent LDO Linear Regulator

■ Main Product :

Part Number	Vin (MAX)	Vin (MIN)	Vout (MAX)	Vout (MIN)	Output Method		Iout (MAX)	IQ	PSRR (TYP)	DFN1616	DFN2020	SOT-23	SOT-25	SOT-89
	[V]	[V]	[V]	[V]	Fixed	Adj.	[A]	[uA]	[dB]					
LR9107	5.25	1.4	2.8	1.8	✓		0.2	25	70 @ 1KHz				•	
L1913	5.5	2.5	5.5	1.25	✓	✓	0.15	120	-				•	
LR1185	5.5	2.7	4.15	-	✓		0.15	50	-				•	
LR1120-XX	5.5	2.5	4.5	1.5	✓		0.15	230	65 @ 1KHz				•	
LR1198	5.5	2.5	3	1.5	✓		0.3	150	50 @ 10KHz				•	
LR1193	5.5	1.8	2.5	1.5	✓		0.3	130	70 @ 100Hz				•	
LR1143	5.5	3	-	1.2		✓	0.4	50	67 @ 1KHz		•		•	
LR1142	5.5	2.5	-	0.5		✓	0.5	70	57@ 1KHz	•	•		•	
L1923	5.5	2.5	3.9	1.25	✓	✓	0.5	120	65 @ 100Hz				•	
LR1120	5.5	2.5	4	1.8	✓		0.5	70	55 @ 10KHz				•	
LR9211	5.5	2.5	3.3	0.8	✓	✓	0.6	115	65 @ 1KHz				•	
LR9212	5.5	2.5	3.3	0.8	✓	✓	1	120	65 @ 1KHz				•	
LR1101	6	2	5	1.5	✓		0.1	10	-			•	•	•
L1131A/C	6	2.5	5	1.5	✓		0.15	18/95	50 / 70 @ 1KHz				•	•

Low-quiescent LDO Linear Regulator

■ Main Product :

Part Number	Vin (MAX)	Vin (MIN)	Vout (MAX)	Vout (MIN)	Output Method		Iout (MAX)	IQ	PSRR (TYP)	DFN1010	DFN2020	SOT-23	SOT-25	SOT-89
	[V]	[V]	[V]	[V]	Fixed	Adj.	[A]	[uA]	[dB]					
LR9103	6	2	3.3	1	✓		0.15	60	72 @ 100Hz	•			•	
LR1112	6	2.5	-	0.4		✓	0.15	85	65 @ 100Hz				•	
LR9113	6	2.1	5	1.1	✓		0.3	60	72 @ 100Hz	•			•	
UR6223	6	1.7	4	1.2	✓		0.3	220	65 @ 1KHz	•			•	
LR9101	6	2	3.3	1	✓		0.3	25	70 @ 1KHz			•	•	
LR9102	6	2	3.6	1	✓		0.3	90	75 @ 1KHz		•	•	•	
L1127/A/E	6	2.5	4.75	0.8	✓	✓	0.3	200	-				•	
LR2125	6	2.8	5.5	0.8	✓	✓	0.3	160	45 @ 10KHz				•	
LR9203	6	1.7	5	1.2	✓		0.5	30	55 @ 1KHz				•	
LR9153	6	2.1	5	1.1	✓		0.5	80	65 @ 1KHz	•	•		•	•
LR1148	6	2.3	-	0.8		✓	0.6	80	-				•	
UR6222	6	1.7	4	1.2	✓		0.7	120	65 @ 1KHz				•	
UR6227	6	1.7	5	1.5	✓		0.7	200	65 @ 1KHz				•	•
LR1812	6	1.5	3.6	1.2	✓		1	110	65 @ 1KHz				•	•

Low-quiescent LDO Linear Regulator

■ **Main Product :**

Part Number	Vin (MAX)	Vin (MIN)	Vout (MAX)	Vout (MIN)	Output Method		Iout (MAX)	IQ	PSRR (TYP)	DFN2020	SOT-23/25	SOT-89	SOT-223	SOP/HSOP
	[V]	[V]	[V]	[V]	Fixed	Adj.	[A]	[uA]	[dB]					
LR1805	6	1.5	5	1	✓	✓	1	90	65 @ 1KHz	•		•		
LR1801	6	1.5	5	1.2	✓		1	90	65 @ 1KHz	•		•		•
LR9272/LR9273	6	1.4	5	1.2	✓	✓	1	100	70 @ 1KHz		•	•		•
LR1121B	7	3.1	5.5	2.1	✓		0.2	65	70 @ 1KHz		•			
L1183B	7	2.2	3.3	1.2	✓		0.3	50	50 @ 1KHz		•			
L1186	7	2.215	-	1.215		✓	0.6	35	40 @ 1KHz		•			•
L1188	7	3.8	3.3	2.8	✓		0.8	50	60 @ 100Hz				•	
L11810	7	3.8	3.3	2.8	✓		1	50	60 @ 100Hz				•	
LR2126	7	2.5	-	0.8		✓	1	70	-	•	•	•		•
L11815A/B	7	2.5	3.3	1.2	✓	✓	1.5	70/45	50 @ 1KHz				•	•
LR1122D	7.5	2.2	5	1.2	✓		0.2	40	75 @ 1KHz		•	•		
LR1102	8	2.8	5	1.8	✓		0.15	70	70 @ 1KHz		•			
LR1106	8	2.5	5	1.5	✓		0.4	50	-		•	•		•
UR6225	10	2.5	6	1.5	✓		0.3	4.5	-		•	•		
UT7500	24	2.8	5	1.8	✓		0.1	20	-			•		

Ultralow-quiescent LDO Linear Regulator

■ Main Product :

Part Number	Vin (MAX)	Vin (MIN)	Vout (MAX)	Vout (MIN)	Output Method		Iout (MAX)	IQ	PSRR (TYP)	DFN1010	DFN2020	SOT-23	SOT-25	SOT-89
	[V]	[V]	[V]	[V]	Fixed	Adj.	[A]	[uA]	[dB]					
LR1101	6	2	5	1.5	✓		0.1	10	-			●	●	●
LR9280	6	1.3	4	1.2	✓		0.15	1.5	48 @ 120Hz		●	●	●	●
LR9283	6.5	2.5	5	1.5	✓		0.3	1.5	65 @ 1KHz	●			●	
LR9282A	7	1.8	5	0.8	✓		0.3	0.5	-				●	
LR9282	7	1.8	5	0.8	✓		0.3	1.5	-	●		●	●	●
LR9284	7	2	4	1.5	✓		0.5	7	70 @ 1KHz				●	●
LR78XX	8	2.2	5	1.2	✓		0.5	4.3	50 @ 1KHz			●	●	●
L1131B	11	2.2	5	1.2	✓		0.2	2.5	50 @ 1KHz			●	●	●
UT10XX	12	2.8	7	1.8	✓		0.02	6	-					●
LR1012	12	2.8	6	1.8	✓		0.075	3	-			●	●	●
UR51XXH	18	5.5	5	3.3	✓		0.08	4	-					●
UR56XX_Series	18	3.5	12	1.5	✓		0.5	3	-			●	●	●

Ultralow-quiescent LDO Linear Regulator

■ **Main Product :**

Part Number	Vin (MAX)	Vin (MIN)	Vout (MAX)	Vout (MIN)	Output Method		Iout (MAX)	IQ	DFN2020	SOT-23	SOT-25	SOT-89	SOT-223
	[V]	[V]	[V]	[V]	Fixed	Adj.	[A]	[uA]					
UT71XX	24	2.5	7	1.5	✓		0.02	16			•	•	
UT72XX	32	4	5	3	✓		0.04	15			•	•	
UR78XX	36	5.3	12	3.3	✓		0.07	3				•	
UR75XX	36	3.5	12	1.5	✓		0.07	4		•	•	•	•
UR71XX	36	5.3	5	3.3	✓		0.08	4	•	•	•	•	•
UR81XX	36	5.3	6	3.3	✓		0.08	10				•	
UR72XX	36	3.5	12	1.5	✓		0.1	3		•	•	•	
UR72XXH	36	4.3	12	1.5	✓		0.15	7		•	•	•	
UR75XXS	40	2.3	5	3.3	✓		0.1	4			•	•	•

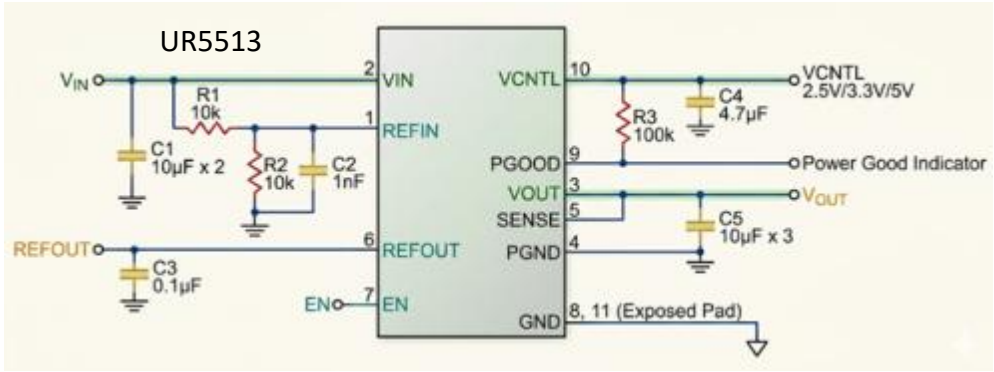
DDR Bus Termination Regulator

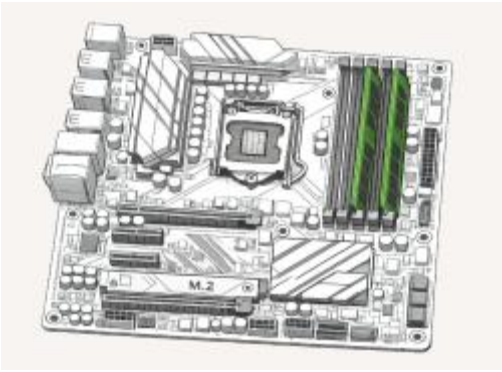
Main Product :

Part Number	Vin (MIN)	Vin (MAX)	IOUT (MAX)	DDR				DFN3030	SOP-8/10	HSOP-8/10	MSOP-8/10	TO-252/263
	[V]	[V]	[A]	I	II	III	IV					
UR5595	2.2	5.5	1.5	✓	✓				●	●		
UR5596	2.2	5.5	1.5	✓	✓				●	●		
UR6517	1.0	5.5	1.8	✓	✓	✓	✓			●		
UR5512	1.6	5.5	2	✓	✓				●	●		●
UR6512	1.5	2.5	2	✓	✓	✓				●		
UR6515C	1.5	2.5	2	✓	✓	✓				●		
UR5513	1.1	3.5	2			✓	✓	●			●	
UR5516	1.2	3.5	3	✓	✓				●	●		●
UR5517	3.0	5.5	3	✓	✓	✓		●	●	●	●	

Feature :

- Sink/Source Tracking Termination Regulator
- Power Good to Monitor Output Regulator
- Built in Soft-start, OCP & OTP.



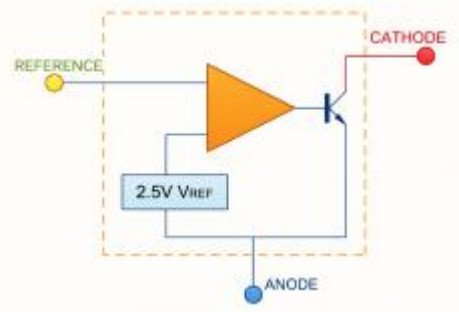


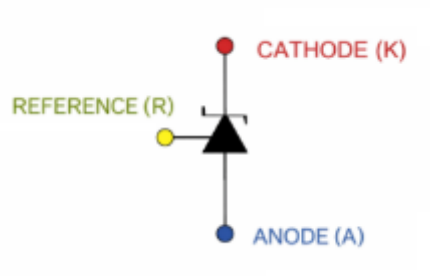
Shunt Voltage Reference Regulator

Part Number	VREF	VKA	IKA (MIN)	IKA (MAX)	SOT-23/25	SOT-89	SOP-8	TO-92
	[V]	[V]	[mA]	[mA]				
TL432D	0.8	15	1	50	•	•	•	•
TL432C	1.24	15	1	10	•	•	•	•
ULVH431	1.24	18	0.1	50	•	•		•
TL432	1.25	15	1	50	•	•	•	•
LL431	2.495	36	0.1	100	•	•	•	•
TL431	2.495	36	0.5	100	•	•	•	•
TL1093	2.495	36	0.5	100	•	•		
TL431H	2.495	36	1	100				•
TL431TV	2.495	36	1	100	•			
TL431HP	2.495	36	0.5	100	•	•	•	•
UATL431	2.495	37	0.035	100	•			
TL431L	2.5	20	1	100	•	•	•	•
LM4041-XX	1.225 - 10	10	0.07	12	•			
M385-XX	1.235 - 2.5	-	0.015	30	•		•	•

LM4041 & M385 are Micropower Voltage Reference Solution.

■ TL431 Block Diagram & Symbol





■ Application

- Power supply feedback control
- Voltage reference circuits
- Over-voltage protection
- Servo Drive Control Module

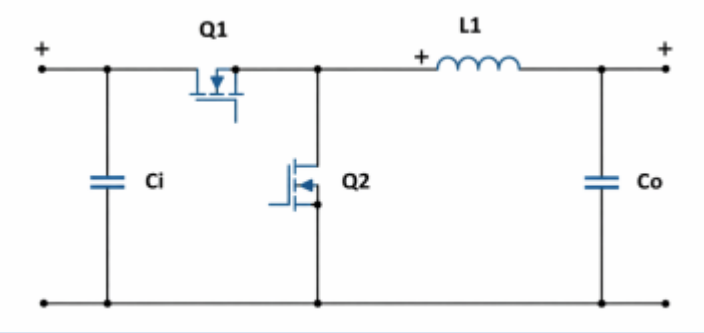
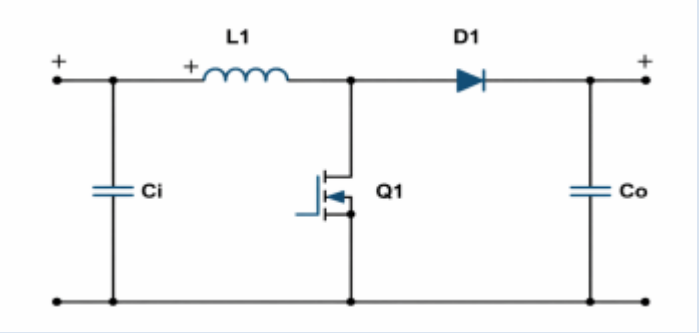
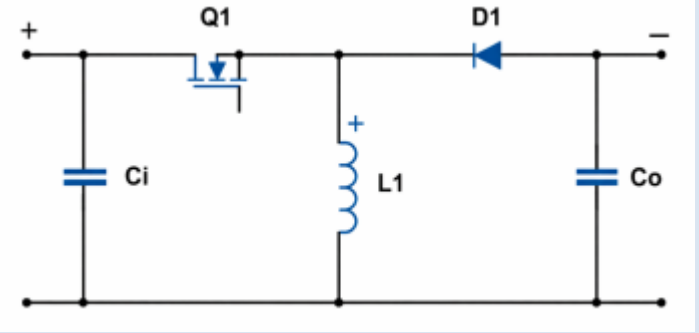
Low/Mid-voltage Switching Regulator

DC/DC Switch Regulators (120+)

- Buck / Boost / Inverting Diverse Conversion Topologies
- Wide Input Voltage Range
- High Efficiency
- Low Heat Dissipation
- A Wide Variety of Package





■ Buck Converter	■ Boost Converter	■ Inverter Converter
		

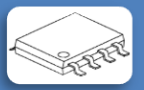
Low/Mid-volt. Step-down Switching Regulator

■ Non-synchronous Rectification Converter :

Part Number	VIN (MAX)	VIN (MIN)	IOUT (MAX)	VFB	IQ	FSW	OCP (Set)	SOT-25/26	SOP/HSOP	TO-252-5	TO-263-5	TO-220/F-5
	[V]	[V]	[A]	[V]	[mA]	[KHz]	[✓/-]					
UC4601/A	15	2.3	-	1	0.1	500/1000		●				
P1596	22	4.5	1.5	1.23	10	150			●	●	●	●
P1785	23	3.6	2	0.8	-	300	✓		●			
P1786	23	4	3	0.8	-	300	✓		●			
P1885	23	3.6	2	0.8	-	300			●			
P1886	23	4	3	0.8	-	300			●			
P3596Q	35	4.5	3	1.23	10	150					●	●
P3576B	40	4.5	2	Fix=5V	8	150				●		
LD1596	40	4.5	2	1.235	5	150			●			
P34563	40	8	3	1.1	7	100			●			
P2576HV	60	7	3	1.23	10	52			●		●	●
P1690	65	5	0.4	1.25	5	150			●			

Low/Mid-volt. Step-down Switching Regulator

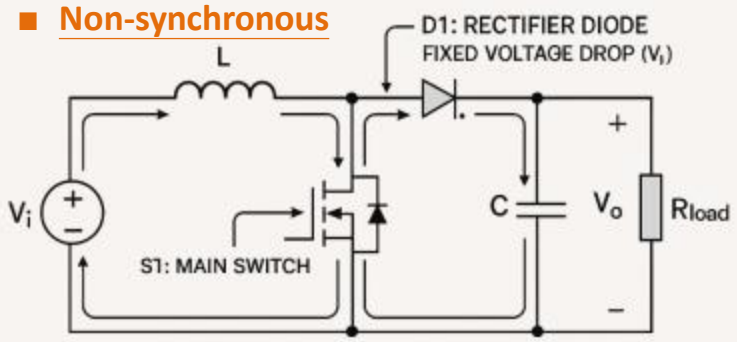
■ Synchronous Rectification Converter :

Part Number	VIN (MAX)	VIN (MIN)	IOUT (MAX)	VFB	IQ	FSW	DFN3030	SOT-25/26	SOP/HSOP
	[V]	[V]	[A]	[V]	[mA]	[MHz]			
UC3656	5.5	2.5	1	0.6	0.3	1.6		●	
UD05103	5.5	3	1	0.6	0.6	1.5		●	
UD05122	5.5	2.5	1.2	0.6	0.4	1.4		●	
UD05154	5.5	2.7	1.5	0.6	0.05	1.5		●	
UD05208/UD05209	5.5	2.7	2	0.6	0.05/0.7	1.5		●	
UD05251	5.5	2.6	2.5	0.6	0.4	1.2	●		●
UD05306	5.5	2.8	2	0.8	0.46	1	●		●
UD05123	5.5	2.5	1.2	0.6	0.09	2.25		●	
UD16203	16	4.5	2	0.6	-	1.2		●	
P1482/A	18	6	2	0.923	5	0.365			●
P1484/A	18	6	3	0.923	5	0.365			●
SR2803	28	4	3	0.82	5	0.33			●

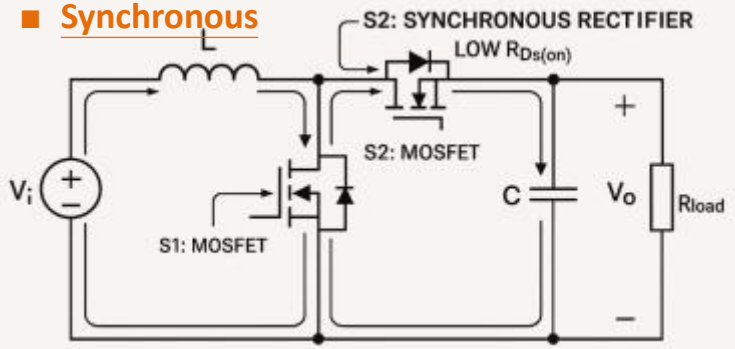
Low-voltage Step-up Switching Regulator

Part Number	Synchronous [Y/N]	VIN (MAX) [V]	VIN (MIN) [V]	VOUT Range [V]	IOUT (MAX) [A]	VFB [V]	IQ [mA]	FSW [KHz]	SOT-23	SOT-25/26	SOT-89	SOP/HSOP
UC8383	N	5.5	0.8	2.5 - 5	0.1	-	0.018	165			●	
UC3552	N	5.5	2.6	2.6 - 12	-	1.24	0.35	640/1320				●
UC3500	N	7	0.7	2.5 - 5.5	0.15	-	0.018	150	●	●	●	
UC3550	N	8	0.9	3.3 - 5	1	-	0.16	300		●		
UC3383	N	10	0.9	2 - 7	0.4	-	0.008	180		●	●	
UC3380	N	10	0.9	1.8 - 5	-	-	0.219	300		●		
UC3555	Y	4.5	1.6	3 - 5	0.5	1.243	0.16	-				●
UU05052	Y	5	0.6	3 - 5	0.4	1.18	0.034	-		●		
UC3551	Y	6.5	2	-	0.3	1.25	0.001	450		●		

■ Non-synchronous



■ Synchronous

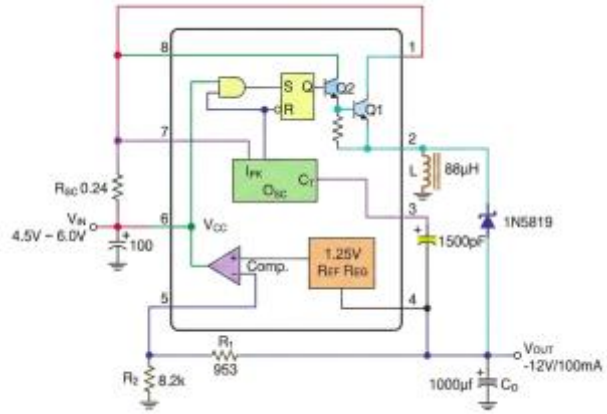


Low/Mid-volt. Inverting Switching Regulator

■ Support 3 kind mode Inverting / Buck / Boost Converter :

Part Number	VIN (MAX)	VIN (MIN)	ISwitch (MAX)	VFB	FSW	SOP-8	DIP-8	TO-220-5
	[V]	[V]	[A]	[V]	[KHz]			
3563	30	3	1.5	1.25	100	●	●	
UMC33167	40	7.5	5	5	72			●
MC3063	40	3	1.5	1.25	150	●		
MC34063A	40	3	1.5	1.25	100	●	●	

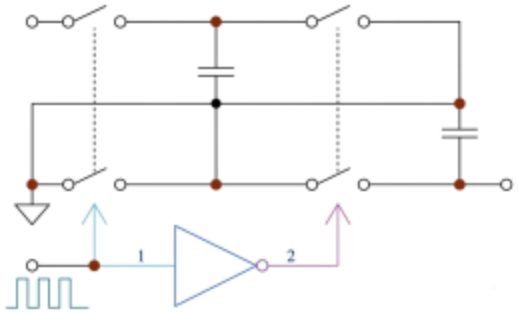
MC34063A Inverting



■ Charge Pump (Positive to Negative Voltage) :

Part Number	VIN (MAX)	VIN (MIN)	VOUT (MAX)	VOUT (MIN)	ROUT (TYP)	η @ RL=5KΩ	FSW	SOP-8
	[V]	[V]	[V]	[V]	[Ω]	[%]	[KHz]	
UTL7660	10	1.5	-1.5	-10	100	98	10	●
UTL7660H	10	1.5	-1.5	-10	55	98	20	●

UTL7660



AC-DC Switching Regulator

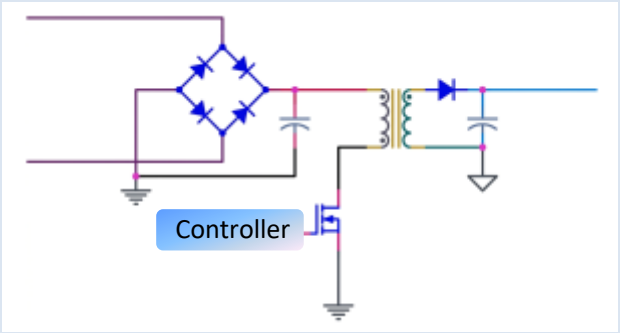
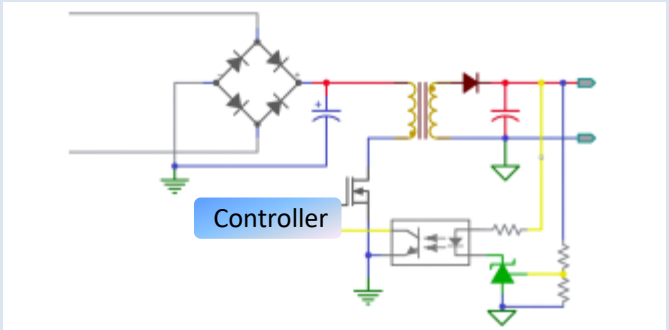
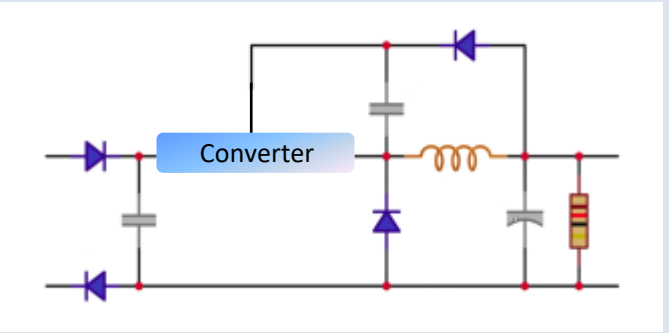
AC/DC Switch Regulators (100+)

- AC/DC Controller & AC/DC Converter (Build-in MOS)
- Topology & Working Mode:
  - PSR (Primary Side Regulator)
  - SSR (Secondary Side Regulation)
  - Non-isolated with PWM
  - QR (Quasi-Resonant)
  - QR-SSR





APP 10~100W Power Supply

■ PSR Controller	■ SSR Controller	■ Non-Isolated with PWM
		

Low/Mid-power Switching Regulator

■ AC/DC Controller :

Part Number	Topology	VCC (MAX)	VCC_ON	HV Start	I_Start	I_Oper.	Freq.	Duty	SOT	SOP	DIP
		[V]	[V]		[uA]	[mA]	[KHz]	[%]			
UPSR104	PSR	29	14.8	-	5	3	70	-	●		
UPSRB01	PSR	30	12.5	-	6	0.4	-	-	●		
UC3863	SSR	30	13.5	-	20	2.5	Adj	78	●	●	●
UC3873	SSR	30	13.8	-	20	2.5	70	76	●		
UC3800	SSR	30	18.5	✓	15	1.8	70	78		●	
UC3875A	SSR	36	18	-	15	1.8	Adj	78		●	●
UC3849B	SSR	36	18	✓	15	1.8	70	78	●	●	●
UC3801*	QR-SSR	36	16	-	5	0.68	70	64	●		
UC3823*	QR-SSR	34	16	-	5	0.68	70	64	●		
UC3826*	QR-SSR	40	15.8	-	5	0.68	70	66	●		

■ AC/DC Converter :

Part Number	Topology	VCC (MAX)	VCC_ON	HV Start	I_Start	I_Oper.	Freq.	Duty	Combo		SOP	DIP
		[V]	[V]		[uA]	[mA]	[KHz]	[%]	VDS[V]	RON[Ω]		
USR3651/2	PSR	28	14.5	-	20	2	75	-	650	7.5/4	●	
USR3651S/2S	PSR	28	14.5	✓	20	2	75	-	650	7.5/4	●	
US2651	Non-isolated	40	8.5	-	35	3	70	-	600	15	●	●
US2351	Non-isolated	40	7.8	-	20	2.5	66	-	600	15	●	
US4657*	Non-isolated	46	7.7	✓	5	1.8	64	-	650	7		●

PWM Controller

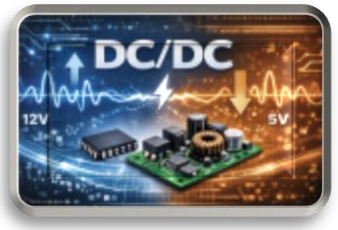
TL494 & Ux525 Series

- Voltage Mode PWM Control
- Dual Complementary Output

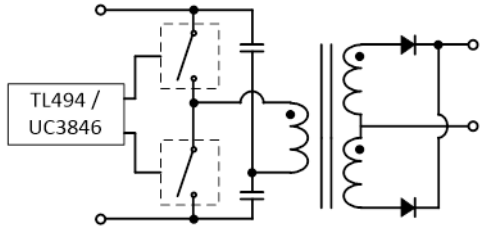
UCx84 Family

- Current Mode PWM Control
- Switch Frequency up to 500kHz

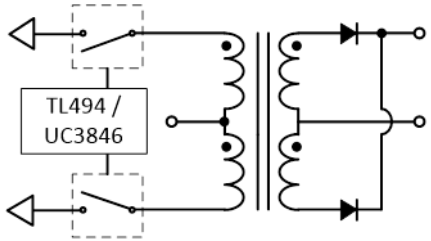




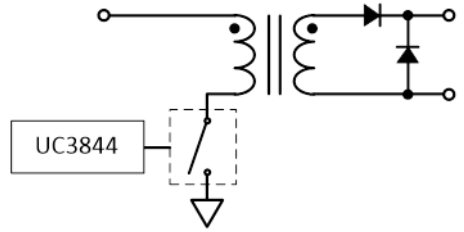
■ Half-bridge



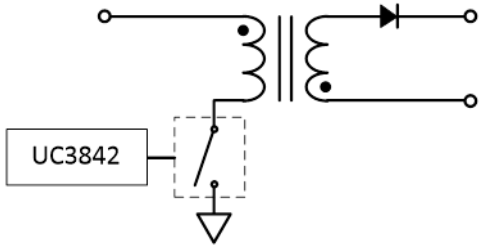
■ Push-pull



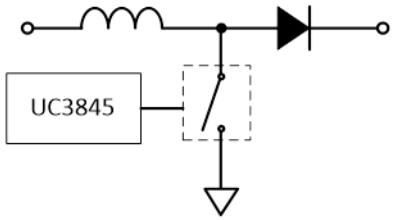
■ AC-DC Forward



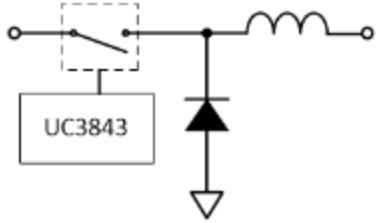
■ AC-DC Flyback



■ DC-DC Boost



■ DC-DC Buck



PWM Controller

■ Current-mode PWM Controller (Single-output)

Part No.	VCC, max [V]	VCC, min [V]	Temp. [°C]	Duty Cycle [%]	Startup Vcc [V]	SOP-8	DIP-8	Common Parameter
UC1842B	30	10	-40 ~125	100	16	•	•	Start-up I_{VCC} current: Typ: 0.25mA, Max 0.5mA Reference voltage V_{REF}: 5.0V Oscillator frequency f_{OSC}: 52kHz Error amp input V_{FB}: 2.5V Current sense A_{CS}: 3V/V
UC1843B	30	7.6	-40 ~125	100	8.4	•	•	
UC1844	30	10	-40 ~125	50	16	•	•	
UC1845	30	7.6	-40 ~125	50	8.4	•	•	
UC2842B	30	10	-40 ~85	100	16	•	•	
UC2843B	30	7.6	-40 ~85	100	8.4	•	•	
UC2844	30	10	-40 ~85	50	16	•	•	
UC2845	30	7.6	-40 ~85	50	8.4	•	•	
UC3842B	30	10	-25 ~70	100	16	•	•	
UC3843B	30	7.6	-25 ~70	100	8.4	•	•	
UC3844	30	10	-25 ~70	50	16	•	•	
UC3845	30	7.6	-25 ~70	50	8.4	•	•	

■ Current-mode PWM Controller (Dual-output)

Part No.	Temp.	SOP-16	SOP-16W	DIP-16	Common Parameter
UC2846	-40 ~85	•	•	•	Start-up Vcc threshold:7.7V f_{osc}: 43kHz A_{cs}: 2.75V/V
UC3846	-25 ~70	•	•	•	

All parts are compatible with T company in PN and pin-out

■ Voltage Mode PWM Controller

Part No.	TSSOP-16	SOP-16	SOP-16N	SOP-16W	DIP-16
U2525A U3525A	•	•	•	•	•
TL494	•		•		•
TL594			•		•

PWM Controller

Voltage mode PWM control

- TL494 series
- Ux525 series
  - Dual complementary output

Current mode PWM control

- UCx84x family
  - Cycle-by-cycle current limiting
  - Switch frequency up to 500kHz

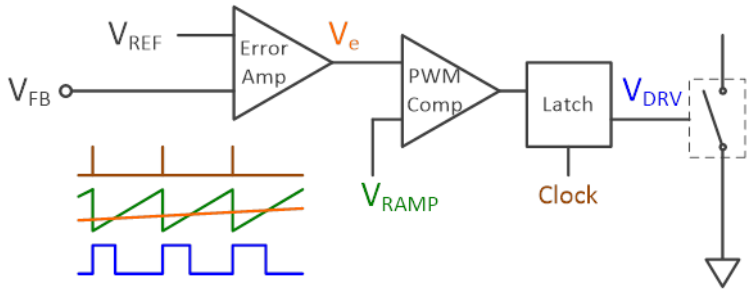
Green mode control IC

- PWM-PFM-burst for light-load eff.
- Advanced protection options

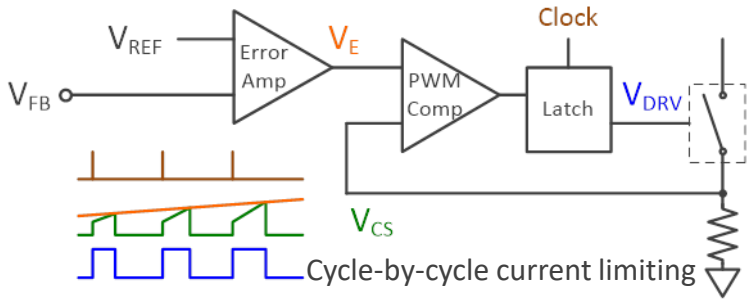
QR (quasi-resonant) mode

- Further efficiency lift

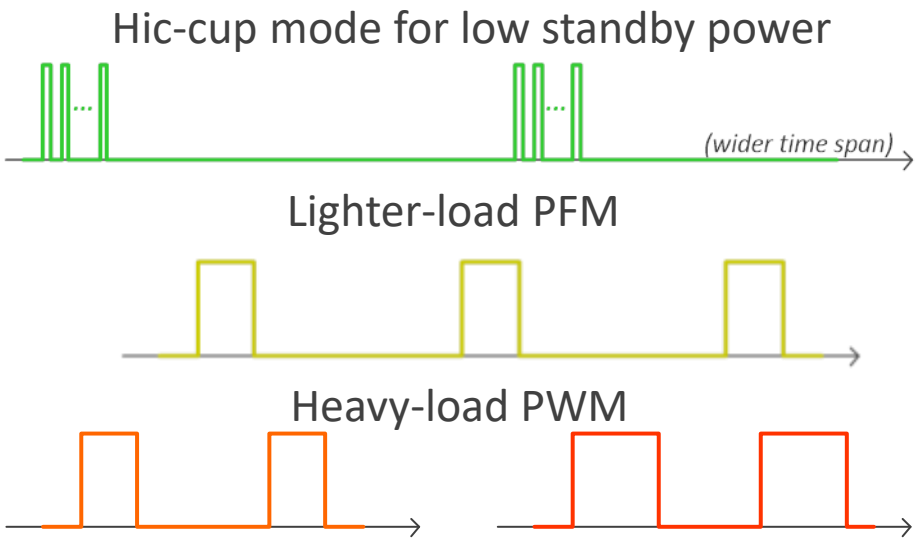
■ Voltage-mode PWM Control Scheme



■ Current-mode PWM Control Scheme



■ Green-mode Modulation



■ QR-mode Valley Switching

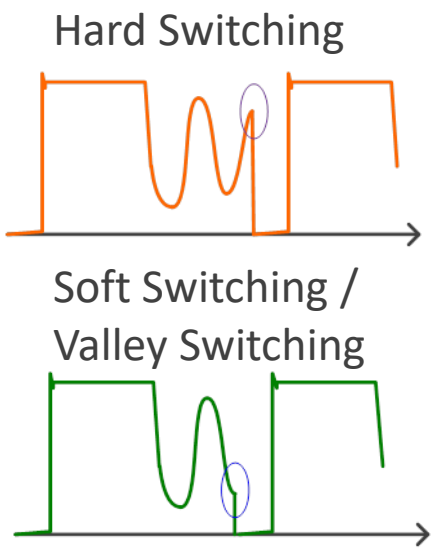
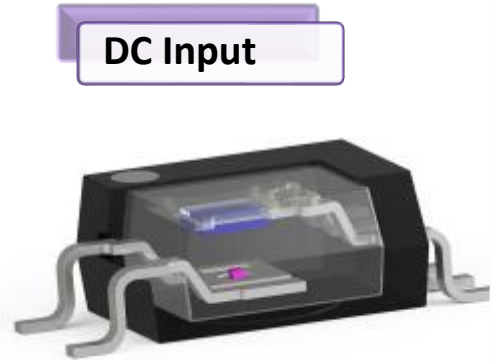
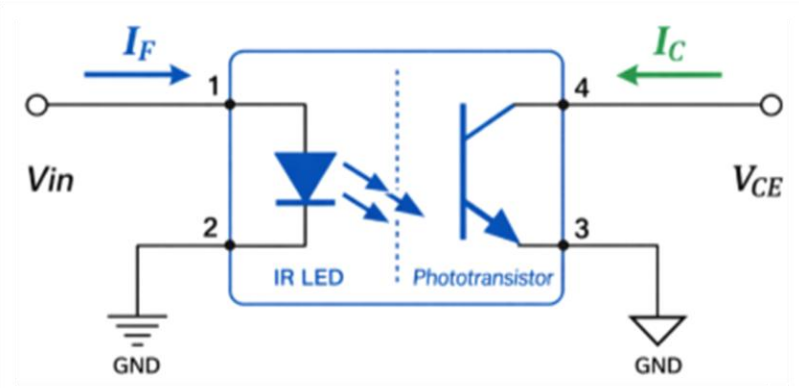


Photo-coupler

Phototransistor - AC Input

- VCEO: 35 & 80V
- Available in various CTR ranks.
- Channel: 1-ch
- Package: SSOP-4, SOP-4, LSOP-4, SSOP-16-4





Phototransistor - DC Input

- VCEO: 35, 40, 70, 80, 120 & 350V
- Available in various CTR ranks.
- Channel: 1-ch, 4-ch
- Package: SSOP-4, SOP-4, LSOP-4, SMD-4, SSOP-16-4, DIP-4M

■ 1-Channel

SSOP-4	SOP-4	LSOP-4	SMD-4	DIP-4	DIP-4M
4.4 x 2.7 x 2.0	4.4 x 3.85 x 2.0	7.5 x 3.8 x 2.0	6.5 x 4.6 x 3.6	6.5 x 4.6 x 3.5	6.5 x 4.6 x 3.5
					

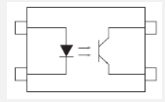
■ 4-Channel

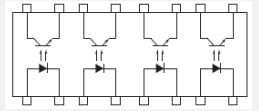
SSOP-16-4
10.28 x 4.4 x 2.0


Photo-coupler

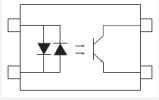
Part Number	Input	Ch#	VISO	VCEO	CTR Rank	IF	SSOP-4	SOP-4	LSOP-4	SMD-4	SSOP-16-4	DIP-4	DIP-4M
			[Vrms]	[V]	min-max [%]	[mA]							
UPC817x	DC	1	5000	35	50 - 600	5				•		•	•
UPC2711x	DC	1	3750	40	100 - 400	1		•					
UPC2701Ax	DC	1	3750	70	50 - 300	5		•					
UPC2761Bx	DC	1	3750	70	50 - 400	5		•					
UPC217x	DC	1	3750	80	50 - 600	5	•						
UPC356x	DC	1	3750	80	50 - 600	5		•					
UPC357x	DC	1	3750	80	50 - 600	5		•					
UPC816x	DC	1	5000	80	50 - 600	5				•		•	•
UPC10xx	DC	1	5000	80	50 - 600	5			•				
UPC358x	DC	1	3750	120	80 - 400	5		•					
UPC2703x	DC	1	3750	120	50 - 400	5		•					
UPC8171	DC	1	5000	350	20 -300	5						•	
UPC247x	DC	4	5000	80	100 - 600	5					•		
UPC354x	AC	1	3750	35	20 - 400	±1		•					
UPC214x	AC	1	3750	80	20 - 400	±1	•						
UPC814x	AC	1	5000	80	20 - 300	±1			•				
UPC244x	AC	4	3750	80	20 - 400	±1					•		

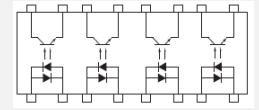
DC Input





AC Input





Common Parts UPC217 / 356 / 816 / 817 / 1008 /1009 are Pin Compatible with E & L Company.

Logic & Analog Product Introduction

3 Analog & Interface IC

- Op Amplifier • Voltage Comparator • Hall Sensor IC
- Motor Driver • Voltage Detection • Bus Interface

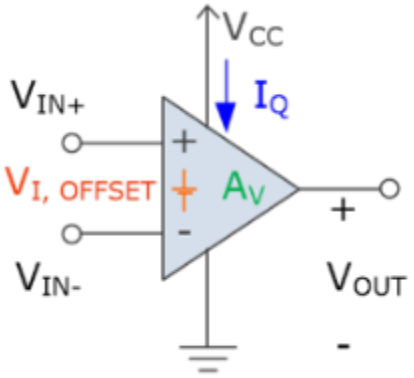


Operational Amplifier

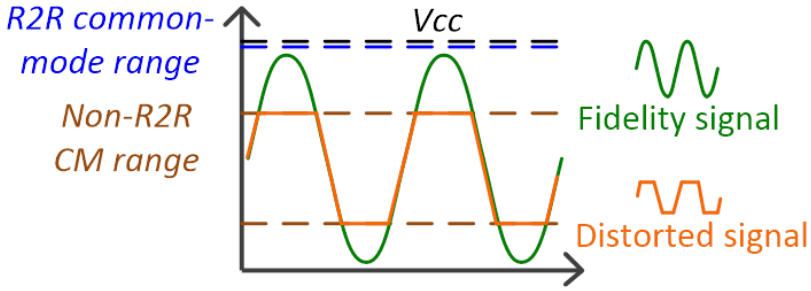
Operational amplifier (>120 parts)

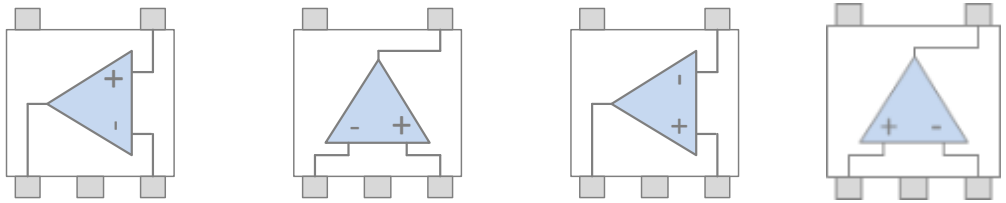
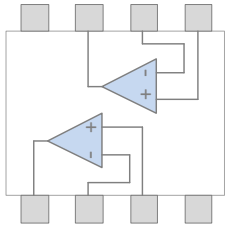
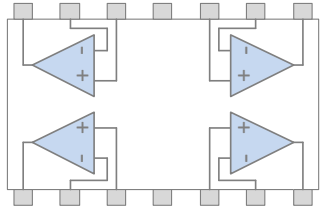
- Low-Consumption
- Low-Offset
- Low-Drift
- High-accuracy
- High-bandwidth
- High-slew-rate

Pin Compatible with T / O / N Company



Rail-to-rail benefit

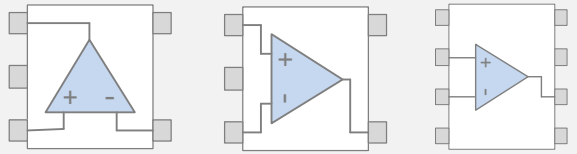


1-ch op amp	2-ch op amp	4-ch op amp
		

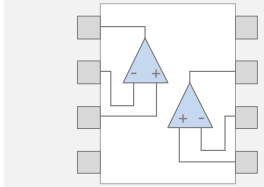
Signal Amplifier / Analog Mathematical Operation / Signal Processing & Conversion / Waveform Generation & Comparison

Low-consumption Operational Amplifier

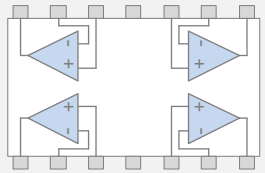
PN / 1-ch	Volt [V]	Rail-to-Rail	IQ [μA]	BW [KHz]	VIOS[mV]	SOT-353	SOT-25	SOP-8
ULV8521	2.1~5.5	RRIO	12	170	1.5		•	•
LV8541	2.1~5.5	RRIO	58	700	<3.	•		
ULV8541	2.7~5.5	RRIO	75	950	1m	•		•
ULV6001	1.8~5.5	RRIO	100	1500	<7	•	•	
ULV8691	2.7~6.0	RRO	95	8000	0.3		•	
LLV321	2.5~5.5	RRO	100	1400	1m	•		



PN / 2-ch	Volt [V]	Rail-to-Rail	IQ [μA]	BW [KHz]	VIOS[mV]	SOT-23-8	DFN	MSOP	TSSOP	SOP-8
ULV7266	1.8~5.5	RRIO	0.9	120	<8.5					•
ULV8522	2.1~5.5	RRIO	12	170	1.5					•
ULV8542	2.1~5.5	RRIO	70	1100	<1.6		•	•	•	•
ULV2333	1.8~5.5	RRIO	80	350	0.014		•	•	•	•
OPA2336	2.3~5.5	RRO	20	100	0.5		•			•
LV358S	2.7~5.5	RRO	95	2000	1		•	•	•	•
LV358T	2.7~5.5	RRO	100	1600	0.4	•				



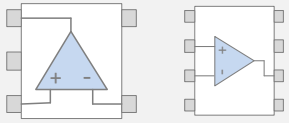
PN / 4-ch	Volt [V]	Rail-to-Rail	IQ [μA]	BW [KHz]	VIOS[mV]	TSSOP-14	SOP-14
LV8544	2.1~5.5	RRIO	40	700kHz	<3.5	•	•
ULV4333	1.8~5.5	RRIO	105	350kHz	0.014	•	



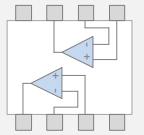
High-accuracy / High-bandwidth Op Amp

■ High-Accuracy Low-drift OP Amp.

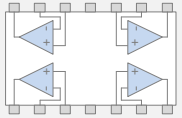
PN / 1-ch	Volt [V]	Temp. [˚C]	Rail to Rail	VIOS[μV]	IQ[mA]	BW [MHz]	SOT-25	SOP-8	DIP-8
ULV8538	2.7~5.5	-40~125	RRIO	10	0.15	0.43	•	•	
ULV333	1.8~5.5	-40~125	RRIO	14	0.12	0.35	•	•	
OP07C	±3 ~ ±18	-40~125	Non-RR	60	2.7	0.6		•	•
OP27	±4 ~ ±22	-40~125	Non-RR	50	3.2	8		•	
OP37	±4 ~ ±22	-40~125	Non-RR	50	3.2	40		•	



PN / 2-ch	Volt [V]	Temp. [˚C]	Rail-to-Rail	VIOS[μV]	IQ[μA]	BW [MHz]	DFN3030	MSOP-8	TSSOP	SOP-8
ULV8552	2.7~5.0	-40~125	RRIO	1	650	1.2				•
ULV8539	2.7~5.5	-40~125	RRIO	5	185	0.43				•
ULV2333	1.8~5.5	-40~125	RRIO	14	80	0.35	•	•	•	•

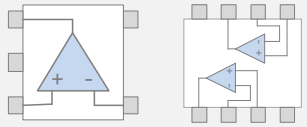


PN / 4-ch	Volt [V]	Temp. [˚C]	Rail-to-Rail	VIOS[μV]	IQ[μA]	BW [MHz]	TSSOP	SOP-8
ULV8554	2.7~5.0	-40~125	RRIO	1	875	1.3	•	•
ULV4333	1.8~5.5	-40~125	RRIO	14	105	0.35		•



■ High-bandwidth OP Amp

Part No.	Ch#	Volt [V]	Temp. [˚C]	Rail-to-Rail	BW[MHz]	SR[V/μs]	IQ[mA]	SOT-25	DFN-10	MSOP	SOP-8
OP37	1	±4 ~ ±22	-40~125	Non-RR	40	9.4	3.2				•
ULV77701	1	2.4~5.5	-40~125	RRIO	34	35	3.8	•			
ULV8615	1	2.7~5.5	-40~125	RRIO	20	11	1.5	•			
ULV662	2	2.5~5.5	-40~125	RRO	50	32	6.5		•	•	•

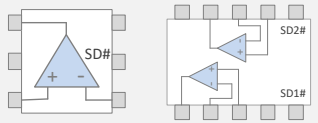


CMOS Rail-to-rail Input & Output Op Amp

OPAmp & Shut-Down

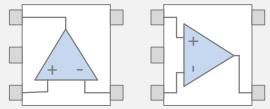
PN	Ch#	Volt [V]	Temp. [°C]	Rail-to-Rail	Shutdown ctrl	V_{IOS}	IQ	BW	SOT-26	MSOP-10
LV2460	1	2.7~6	-40~125	RRIO	Shutdown#	0.5mV	550µA	6.4MHz	•	
LV2463	2	2.7~6	-40~125	RRIO	Shutdown#	0.5mV	550µA	6.4MHz		•
LV712	2	2.7~5.5	-40~125	RRIO	Shutdown#	0.1mV	1.3mA	4MHz		•

with Shutdown Control

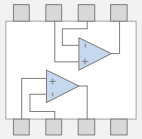


Other Mainstream Rail-to-Rail Input & Output OPAmp

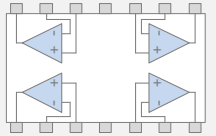
PN / 1-ch	Volt [V]	Temp. [°C]	BW [MHz]	SR [V/µs]	IQ [mA]	VIOS[mV]	SOT-353	SOT-25	SOP-8
ULV721	2.1~5.5	-40~125	7	8.5	1.2	1.5		•	
LV2461	2.7~6	-40~125	6.4	1.6	0.55	0.5	•	•	•
ULV377	2.2~5.5	-40~125	5.5	3.1	0.68	0.5		•	



PN / 2-ch	Volt [V]	Temp. [°C]	BW [MHz]	SR [V/µs]	IQ [mA]	VIOS[mV]	DFN2030	MSOP	TSSOP-8	SOP-8
L6132	2.7~24	-40~85	10	14	0.35	4				•
ULV722	2.1~5.5	-40~125	7	8.5	1.5	1.5				•
LV2462	2.7~6	-40~125	6.4	1.6	0.55	0.5		•		•
LV2622	2.5~5.5	-40~125	3	1.7	0.25	0.7	•	•	•	•
ULV7002	1.5~5.5	-40~125	0.0018	1300	0.3	0.8		•		•



PN / 4-ch	Volt [V]	Temp. [°C]	BW [MHz]	SR [V/µs]	IQ [mA]	VIOS[mV]	SOP-14
LV2464	2.7~6	-40~125	6.4	1.6V	0.55	0.5	•



Alternatives of Basic & General-purpose Op Amp

P2P Parts to T Company

UTC & T Company PN.	Ch#	Volt [V]	Temp. [°C]
TS321 LM321	1	3~30	-40~125
LM358 LM358-Q	2	3~32	-20~85
LM358B	2	3~36	-40~85
LM258	2	3~32	-40~105
LM2904	2	3~32	-40~125
LM2904B	2	3~36	-40~125
LM324	4	3~32	-20~85
LM324B	4	3~36	-40~85
LM224	4	3~32	-40~105
LM2902	4	3~32	-40~125
LM2902B	4	3~36	-40~125

UTC & T Company PN.	Ch#	T Company Category
TL071	1	JFET-buffered high-slew-rate op amplifier
TL062 TL072 TL082 LF353	2	
TL054 TL074 TL084 LF347	4	
LM741 LM318	1	Conventional amp
UNE5534	1	Conv. low-noise amp.
UNE5532 LM833	2	

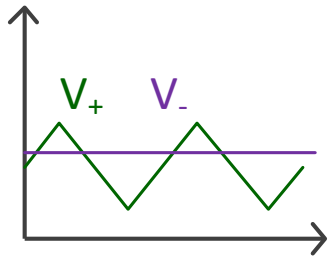
P2P Parts to Other Supplier

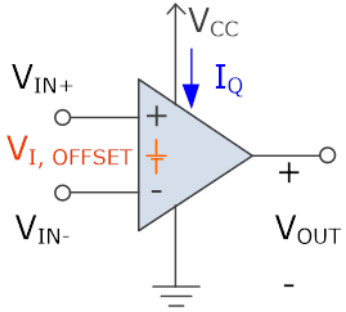
UTC Part No.	Ch#	Supplier	Vendor PN
M2107	1	Niss. Company	NJM2107
M2125	1		NJM2125
M2100	2		NJM2100
M2115	2		NJM2115
MC1458	2		NJM1458
3404	2		NJM3404
3414	2		NJM3414
MC4556	2		NJM4556
MC4558	2		NJM4558
MC4560	2		NJM4560
M4565	2		NJM4565
MC4580	2		NJM4580
3422	2	S Company	TSH22
3308	2	R Company	BA3308
MC33078	2	O Company	MC33078
MC33178	2		MC33178
MC33272	2		MC33272
MC34072	2		MC34072
MC34074	4		MC34074

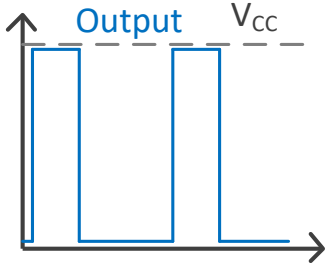
Voltage Comparator

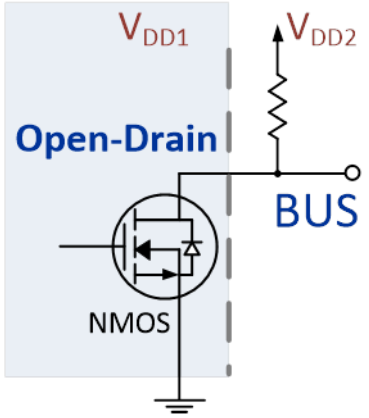
Voltage Comparator (>25 parts)

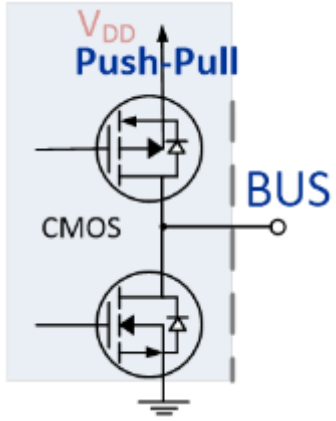
- Low-Consumption Comparator
- Rail-to-Rail Input Comparator
- Open-drain Output / Push-pull Output
- Special type / Extended Type (+Vref)

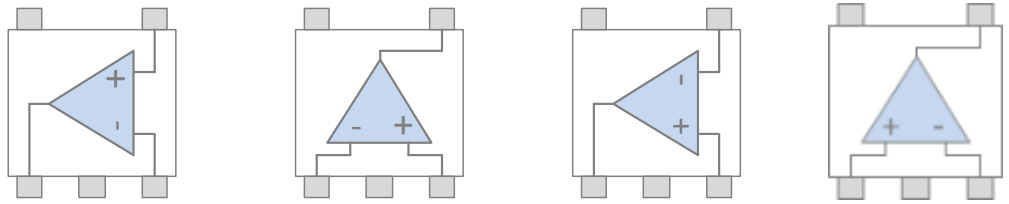
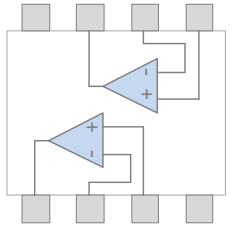
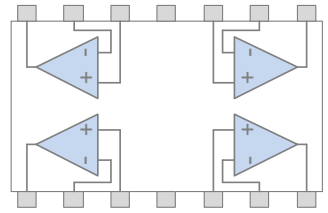








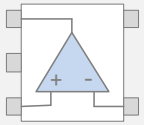


1-ch Comparator	2-ch Comparator	4-ch Comparator
		

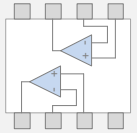
Voltage Comparator

Advanced CMOS Voltage Comparator

PN / 1-ch	Volt [V]	Temp.[°C]	Input	Output	IQ [μA]	VIOS[mV]	SOT-353	SOT-25
LMV331	2.7~5.5	-40~125	-	Open-drain	60	1.7	•	•
ULC77241	1.8~5.5	-40~125	-	Open-drain	6	1		•
LV7235	2.7~5.5	-40~85	R2R	Open-drain	60	1	•	•
LV7239	2.7~5.5	-40~125	R2R	Push-pull	65	1	•	•
ULC8740	2.7~5.5	-40~85	R2R	Push-pull	200	1	•	•



PN / 2-ch	Volt [V]	Temp.[°C]	Input	Output	IQ [μA]	VIOS[mV]	MSOP-8	TSSOP-8	SOP-8	DIP-8
LMV393	2.7~5.5	-40~85	-	Open-drain	100	1.7	•		•	•
ULC3702	3~16	-40~85	-	Push-pull	18	1.2		•	•	•
LV942	2.7~5.5	-40~85	R2R	Push-pull	65	1	•			



P2P Parts to T Company

UTC & T Company PN.	Ch#	Volt [V]	Temp.[°C]	Package
UTL331 TS391 (for TL391)	1	2~36	-40~125	SOT-353 SOT-25
LM393 LM393-Q	2	2~32	-20~85	DFN2020-8 MSOP-8 TSSOP-8 SOP-8 DIP-8
LM393B	2	2~36	-40~85	
LM293	2	2~36	-40~105	
LM2903	2	2~36	-40~125	
LM2903B	2	2~36	-40~125	

UTC & T Company PN.	Ch#	Volt [V]	Temp.[°C]	Package
LM339 LM339-Q	4	2~32	-20~85	QFN-16 (3x3) TSSOP-14 SOP-14 DIP-14
LM339B	4	2~36	-40~85	
LM239	4	2~36	-40~105	
LM2901	4	2~36	-40~125	
LM2901B	4	2~36	-40~125	

Hall Sensor IC

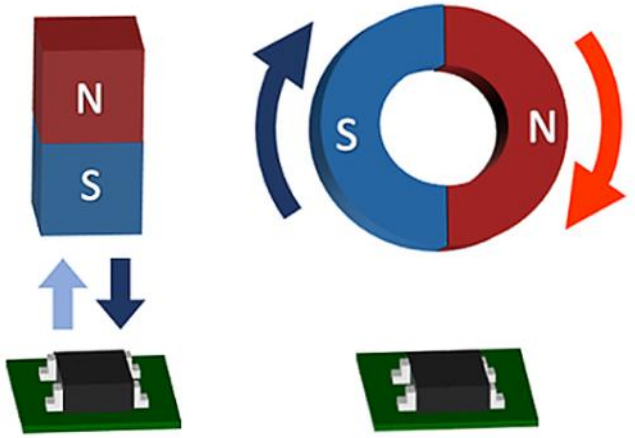
Hall Sensor IC (>30parts)

Category :

- Omni-polar Hall sensor latch
- Bi-polar Hall sensor latch
- Uni-polar Hall sensor latch
- Linear Hall sensor.
- Hall Sensor with Fan Driver

Application :

- Smartphone, Laptop & Liquid Level Gauge.
- Brushless DC Motor & Digital Tachometer.
- Proximity Switch, Counters & Limit Switches.
- Current Sensor, Precision Position & Displacement Measurement.
- DC Fan.

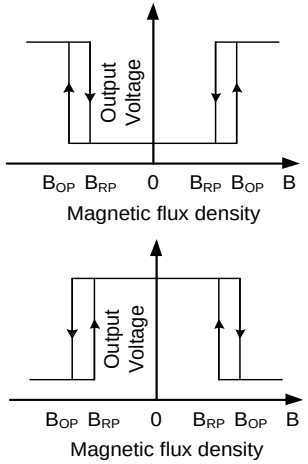




Hall Sensor IC

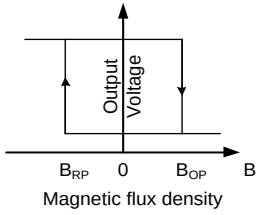
Omni-polar Hall Sensor Latch

Part No.	Vcc [V]	Bop [G]	O/P logic (B>Bop)	SOT-23	SIP-3
SK8552	3~20	Max 100	R-pull-up, High	•	•
UH8102A	2.4~5.5	Max 70	Open-drain, High	•	•
UH8102B			Open-drain, Low	•	•
UH8103		50	Open-drain, Low	•	•
UH8104		40	Open-drain, Low	•	•
UHE4913		35	Open-drain, Low	•	•
UH8105		30	Push-pull, Low	•	•



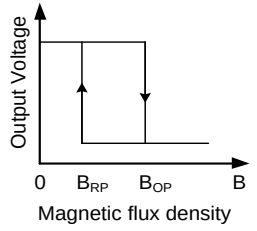
Bipolar Hall Sensor Latch

Part No.	Vcc [V]	Bop [G]	O/P (B>Bop)	SOT-23	SIP-3
SK1816A	3.0~20	Max 50	R-pull-up, Low	Marking-side sensing: N	Marking-side sensing: S
SK1816	3.0~20	Max 50	OC, Low		
SK1816M	3.0~20	Max 50	OC, Low		
SK1812	2.5~20	Max 50	OC, Low		
UHS41	4.5~24	Max 70	OC, Low		



Unipolar Hall Sensor Latch

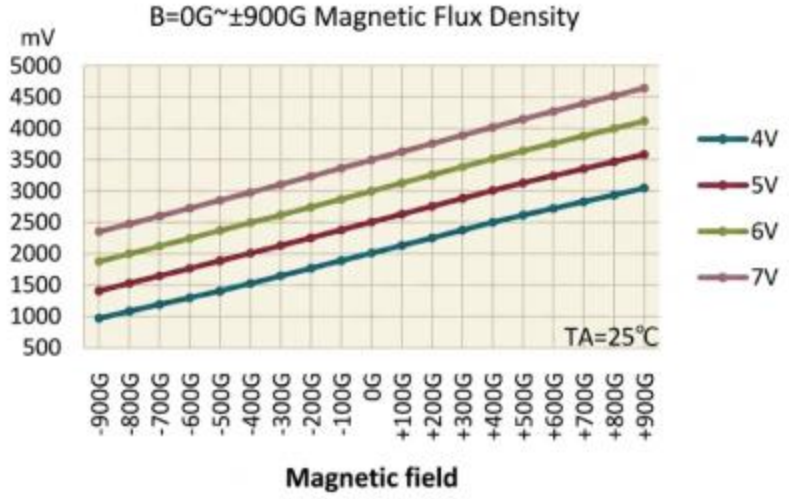
Part No.	Vcc [V]	Bop [G]	Hys. [G]	O/P logic (B>Bop)	SOT-23	SIP-3
UH8100	2.5~5.5	40	10	OD, Low	•	•
SK1901	2.5~20	< 100	45	OC, Low	•	•



Output configuration: OD=open-drain , OC=open-collector

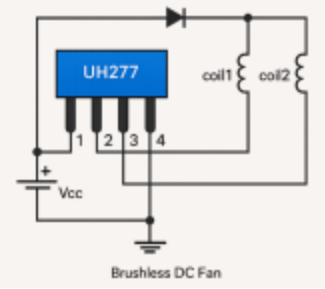
Linear Hall Sensor

Part No.	Vcc	Vout_0G	Sensitivity	SOT-23	SIP-3
SK8509	4~7V	2.5V (Vcc=5V)	1.7mV/G	•	•



Fan Driver / Hall Latch w. Complementary Outputs

Part No.	Vcc [V]	IOUT [A]	Bop[G]	PKG
UH276-A	3~20	0.4	10~50	SIP-4
UH276-B			5~70	
UH276-C			<100	
UH277-A		0.3	10~50	
UH277-B			5~70	
UH277-C			<100	

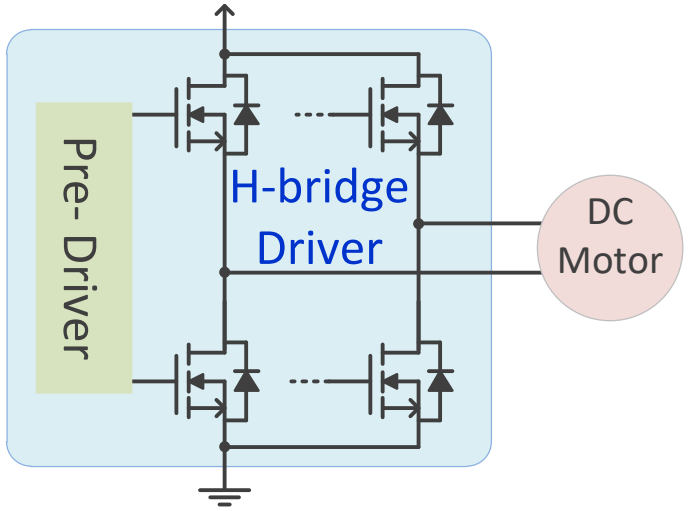


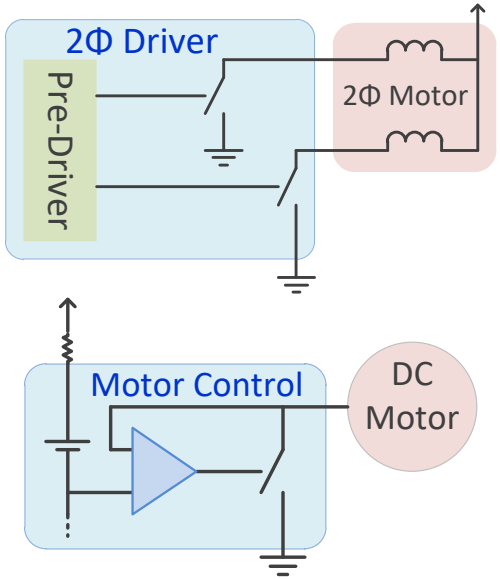
Motor Driver IC

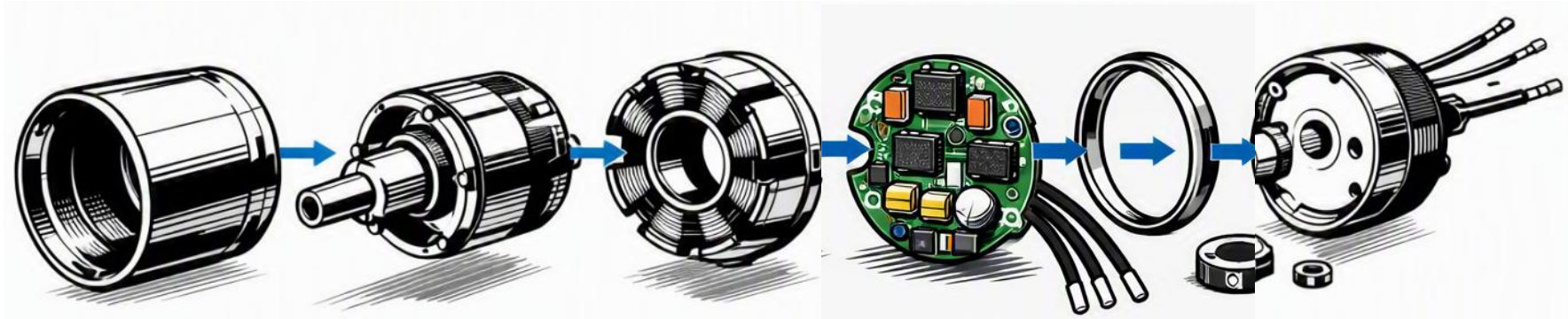
Motor Driver Solution (>30parts)

Key Feature :

- Motor Pre-driver, Stepper Motor & Driver Bridge
- Wide Input Voltage Range
- MCU Control or Hall Sensor Input
- One & Two Channel Available
- PWM-In, CPWM or Linear Control
- Speed Detection Output (FG output)
- Lock Detection Output (RD output)







Motor Driver IC

■ Fan / DC Motor Driver Circuit

Part No.	VCC [V]	IOUT [A]	FG output	RD output	SOT-26	MSOP-8	SOP-8	MSOP-10	SSOP-10	DFN4030-14	TSSOP-16	SSOP-16	TSSOP-20	SSOP-20
UMD9114	2.5~5	0.55			•									
UMD9118	2.4~6.5	1.5					•							
UMD9130	3~5.5	0.5					•							
F1962	3.8~16.8	0.5	✓					•	•					
F2961	4.5~16	1	✓	✓						•	•	•	•	
F2962	4.5~16	2	✓	✓							•		•	
F2967	6~16	Pre-driver	✓	✓								•		•
F2867-R	5.5~16	Pre-driver		✓							•	•		
F2867-F	5.5~16	Pre-driver	✓								•	•		
F6406	2.5~30	Pre-driver		✓			•							
F6406G	2.5~30	Pre-driver	✓				•							
UM2640	4~55	Pre-driver				•	•							

■ Linear Fan Driver

Part No.	VCC	IOUT	VOUT	SOP-8
LR18115	4.5~6V	0.5A	1.6 x V_{SET}	•

■ Dual Motor / Stepper Motor Drive

Part No.	VCC	IOUT	SOP-14	SOP-24
F1836	2.5V ~ 9V	0.8A	•	
L6219	10V ~ 45V	0.75A		•

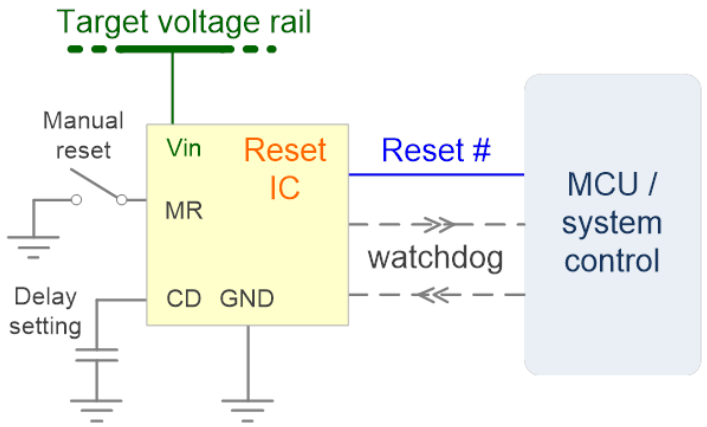
■ Other General-Purpose Motor Controller

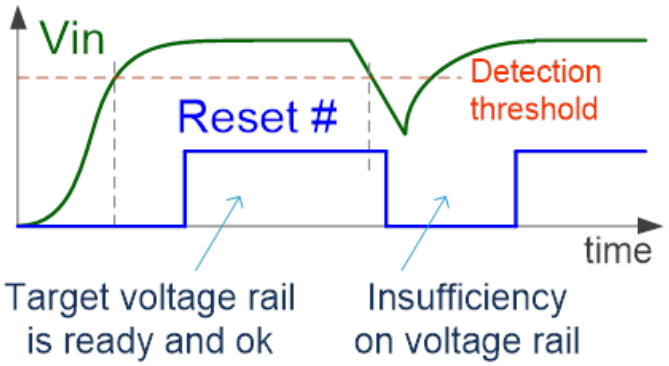
Part No.	Function	Vcc	SOT-26	MSOP-8	SOP-8	DIP-8	SIP-9	TO-126B
BA6208	Reversible Motor Controller	4.5~15V	•	•	•	•	•	
UA9287	Reversible Motor Driver	3.5~15V			•	•		
BA6220	DC Motor Speed Regulator	3.5~16V			•	•		
AN6651	DC Motor Speed Control Circuit	3.5~14.4V						•
AN6652	DC Motor Speed Regulation IC	6~20V						•

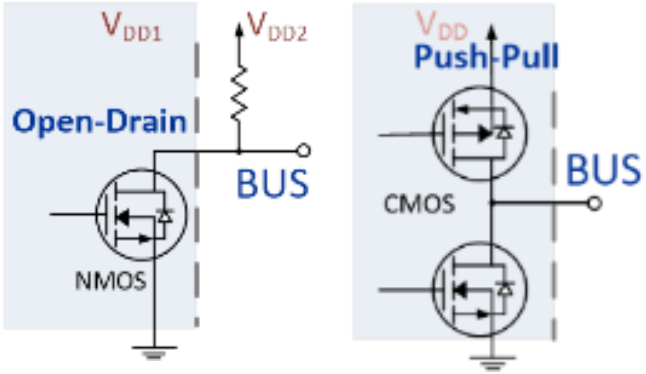
Voltage Detection & Reset

Voltage Supervisor & Reset IC (>30parts)

Typical Circuit / Timing Diagram / Output Types :







Additional Function :

- Power-fail Voltage Monitor
- Programmable Delay
- Manual Reset
- Watchdog



Typical Application :

- MCU Power-on Reset
- Battery Monitor
- Power Supply Sequencing



Voltage Detection & Reset

General Single Voltage Detection Reset IC

**Output configuration: PP=push-pull , OD=open-drain , OC=open-collector*

Part No.	DFN1616	SOT-323	SOT-343	SOT-353	SOT-23	SOT-143	SOT-25	SOT-89	SOT-223	TO-92	Output*	Delay	Other feature
81XX					•		•	•		•	OC		
82XX							•				OC	Preset options	Manual reset
81NXX		•			•			•	•	•	OD	Preset options	
81CXX					•		•	•	•	•	PP	Preset options	
82NXX			•	•	•		•	•		•	OD		
82CXX					•		•	•		•	PP		
83NXX	•										OD	Programmable	Manual reset
88NXX					•	•	•				OD	Programmable	
88CXX							•				PP	Programmable	
89NXX			•				•				OD	Programmable	
89CXX			•				•				PP		
UIC809					•						PP	Preset fixed	
UIC811			•	•	•	•	•				PP	Preset fixed	Manual reset
UIC812		•	•		•	•	•				OD	Preset fixed	Manual reset
UIC813					•	•					PP	Preset fixed	Active-high output
UWD817							•				PP	Preset fixed	Watchdog, Manual reset

Watchdog Reset IC

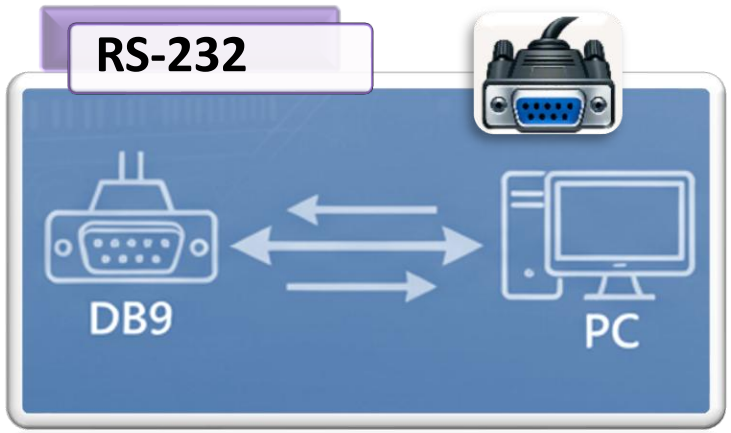
Part No.	Package	Output	Manual R	Watchdog	Pwr-fail monitor
UWD817	SOT-25	PP (RST#)	Low-act.	WDI	-
UWD706	SOP-8	PP (RST#)	Low-act.	WDI+WDO#	PFI + PFO#
UWD708	SOP-8	PP (RST+RST#)	Low-act.	WDI	PFI + PFO#

Reset IC with Special Feature

Part No.	Package	Output
UIC832	DFN2020-8	Long reset time (3~10s) for mobile equipment
86N1C	SOP-8	Independent Vcc and input
UTL7712	SOP-8 DIP-8	Complementary reset outputs and Vref

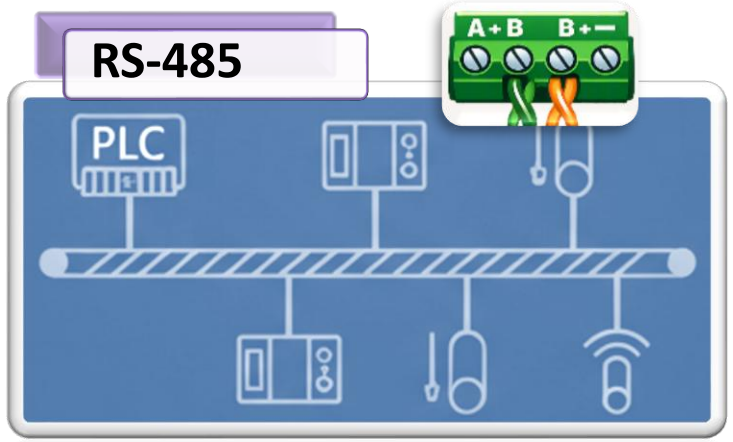
Bus Interface Transceiver (TX/RX)

RS-232



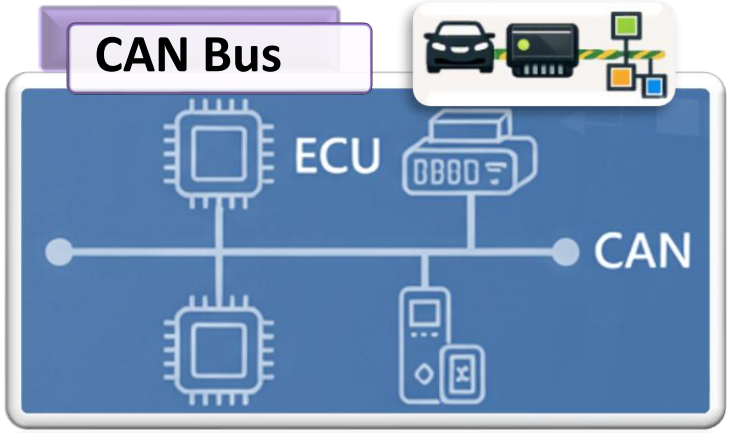
- Topology :
  - Point-to-Point Network
  - Single-ended transmission
  - Full-duplex
- Application :
  - Industrial Control
  - Network Device
  - POS System Peripheral
  - Medical & Measurement

RS-485



- Topology :
  - Multi-point Network
  - Master-Slave Architecture
  - Differential Signal (A/B)
  - Half-duplex / Full-duplex
- Application :
  - Industrial Automation
  - Smart Building
  - Energy & Power
  - Outdoor & Remote Sensor

CAN Bus



- Topology :
  - Multi-point Network
  - Multi-Master Architecture
  - Differential Signal (CAH_H/L)
- Application
  - Industrial Automotive
  - Digital Power Supply
  - Data Center / Server
  - Automotive Electronic

Bus Interface Transceiver (TX/RX)

RS-232	Vcc		Temp.	Tx #	Rx #	Speed	Auto-down	QFN(5x5)	SSOP(209)	SSOP(150)	TSSOP	SOP	DIP
UT213	4.5~5.5V		-40~85°C	4	5	120 kbps				28		28	
UT3243A	3~5.5V		-40~85°C	3	5	235 kbps	✓	32	28		28		
UT232E	3~5.5V		-40~85°C	2	2	120 kbps			16			16	16
UT3232	3~5.5V		-40~85°C	2	2	250 kbps			16	16	16	16	
UT3222	3~5.5V		-40~85°C	2	2	250 kbps			20		20		
UT3223	3~5.5V		-40~85°C	2	2	250 kbps	✓		20		20		
UT3221E	3~5.5V		-40~85°C	1	1	250 kbps	✓		16		16		16
UT3221	3~5.5V		-40~85°C	1	1	250 kbps	✓		16		16		
75185	4.5~5.5V	External V_{DD} & V_{SS} required	0~70°C	3	5	120 kbps			20		20	20	20
75232	4.5~5.5V		0~70°C	3	5	120 kbps			20		20	20	20
75323	4.5~5.5V		0~70°C	5	3	20 kbps						20	20

RS-485	Vcc	Temp.	Duplex	Speed	R_{IN_min}	Bus txr node#	Recvr.	OCP	OTP	Hot-swap glitch-free	Shutdown mode	Slew-rate control	Polarity-free	SOP	DIP
UTRS485	4.5~5.5V	-40~85°C	Half-duplex	1Mbps	12kΩ(1UL)	32	Fail-safe receiver	Short-circuit current protection	Thermal shutdown	✓				•	•
UTRS3088			Half-duplex	1Mbps	96kΩ(⅛UL)	256				✓	✓			•	
UTRS3085S			Half-duplex	1Mbps	96kΩ(⅛UL)	256					✓	✓		•	•
UTRS485N			Half-duplex	1Mbps	96kΩ(⅛UL)	256				✓	✓		✓	•	
UTRS458			Half-duplex	500kbps	96kΩ(⅛UL)	256				✓	✓		✓	•	
UTRS3082			Half-duplex	115kbps	96kΩ(⅛UL)	256				✓	✓			•	
UTRS3080			**Full-duplex**	500kbps	96kΩ(⅛UL)	256				✓	✓			•	

CAN	Vcc	Temp.	Bus support	Bus DC volt.	Bus transient	Max nodes#	Max speed	RFI reduction	SOP-8
UCA82C251	4.5~5.5V (7V rated)	-40~125°C	12V / 24V	±36V	±200V	110	1Mbps	Slope-rate control	•
UCA82C250	4.5~5.5V (9V rated)		12V	-8~18V	-150~100V				•

UTC is always with you

Thank you



https://en.unisonic.com.tw/