



AIC Product Promotion Guideline

Marketing Dept.

2012, Sep

-  LDO
-  DDR Termination Regulator
-  Step-up (Boost) Series
-  Inverting Series
-  LV Step-down (Buck) Series
-  HV Step-down (Buck) Series
-  Buck-Boost Series
-  LED Lighting
-  USB Power Switch



LDO - 150mA Output Current

Priority	Part No.	V _{IN}	I _Q (uA)	I _{OUT}	Suggested Package
1	AIC1746	2V~6V	80	150mA	SOT23, SC70
2	AIC1742	2.5V~8V	35	150mA	SOT23
3	AIC1730	3.6V~12V	55	150mA	SOT23
★	AIC1701	2V~6V	3	150mA	SOT23

- Vin = 6V~8V: AIC1742
- Vin = 8V~12V: AIC1730
- Low I_Q requirement: AIC1701
- P2P parts: AME88XX(AME) , G90X/91X/92X(GMT), RT916X/7X(Richtek), XC62XX(Torex),



LDO - 300/350mA Output Current

Priority	Part No.	V _{IN}	I _Q (uA)	I _{OUT}	Suggested Package
1	AIC1747	2V~6V	80	300mA	SOT23, SC70
1	AIC1952 (Dual)	1.6V~6V	50	300/ 300mA	SOT23, DFN6L
2	AIC1722A	1.6V~8V	55	300mA	SOT23
3	AIC1734	1.6V~12V	55	300mA	SOT23
3	AIC1731	1.6V~12V	35	300mA	SOT23
★	AIC1702	2V~6.8V	3	350mA	SOT23

- Vin = 6V~8V: AIC1722A
- Vin = 8V~12V: AIC1731/34
- Low I_Q requirement: AIC1702
- P2P parts: AME88XX(AME) , G90X/91X/92X(GMT), RT916X/7X(Richtek), XC62XX(Torex),



LDO – 1~2A Output Current

Priority	Part No.	V _{IN}	I _{OUT}	Suggested Package
1	AIC1221	2.3V~6V	2A	SOP8 EP, SOT223
2	AIC1190	1.6V~6V	1A	SOP8 EP, SOT223

- P2P parts: AME88XX(AME) , G95X/96X(GMT), RT9183(Richtek)
- Future product: Output with soft-start



DDR Termination Regulator

Part No.	DDR Spec	I _{OUT}	P2P Parts	Package
AIC1385	DDR/ DDR2/ DDR3	2A	AIC: AIC1383A/B Richtek: RT9 Richtek: RT9 GMT: G2 Anpec: APL5 Fitipower: FP6	SOP8 EP
AIC1387	DDR/ DDR2/ DDR3	3A		SOP8 EP
AIC1386	DDR/ DDR2/ DDR3	2A	AIC: AIC1384 NS: LP2 TI: TPS5 Richtek: RT9 GMT: G2 GMT: 2 GMT: 2	SOP8 EP
AIC1388	DDR/ DDR2/ DDR3	3A		SOP8 EP

- Application: Power regulation for DDR RAM
- Segment: PC, NB, Tablet PC, STB, Networking, LCD-TV



Step-up (Boost) Series

Part No.	V _{IN}	V _{OUT} (MAX.)	I _Q (μ A)	I _{OUT}	Suggested Package	P2P Part	Description
AIC1642	0.9~6V	5.0V	15	0.35A	SOT23	XC9(Torex) RT9(Richtek)	Async.
AIC3413	1.1~5.5V	5.5V	40	0.6A	SOT23-6		Sync.
AIC3415	1.1~5.5V	5.5V	40	1.0A	SOT23-6		Sync.
AIC1896	2.5~10V	30V	100	0.5A	SOT23-6		Async.
AIC1634	2.6~10V	30V	100	0.5A	SOT23-6		Async.
AIC3643	2.5~5.5V	22V		1A	SOT23-6	RT9(Richtek) AAT1(AAT)	Async.
AIC1610	1.8~5.5V	5.5V	20	1A	MSOP8	MAX1 (Maxim) NCP1 (Onsemi)	Sync. COT

- I_{OUT} need to check with AIC FAE, it depends on V_{IN}/V_{OUT} ratio
- Future product: Lower I_Q; Higher current; Higher V_{IN} max.
- LED Backlight application: AIC1896, AIC1634, AIC3643

Inverting Series

Part No.	V _{IN}	V _{OUT}	I _Q (uA)	Package	P2P Part
AIC1652	2.4~7.0V	-1.22 ~ -40V	80	SOP8	
AIC1653	1.8~10V	-1.23 ~ -28V	15	SOT23-5	AME5(AME) LT1(LTC) LM2(NS)

- Small size LCM (Like 華X, 久X...)



LV Step-Down (Buck) Series

Part No.	V _{IN}	V _{OUT} (MIN.)	I _Q (uA)	I _{OUT}	Package	P2P Part
AIC2352	2.5~5.5V	0.6V	65	0.4A	SOT23-5	RT8(Richtek); EUP3(Eutech) MP2(MPS); AME5(AME) G5(GMT); APW7(ANPEC) AX3(AXEElite); FP6(Feeling)
AIC2354	2.5~5.5V	0.6V	65	1.0A	SOT23-5 DFN6L	RT8(Richtek); MPS(MP2) G5(GMT); AT1(GMT) EUP3(Eutech); APW7(Anpec)
AIC2359	2.5~5.5V	0.6V		1.0A 1.0A	DFN12	RT8(Richtek); EUP3(Eutech)
AIC2362	2.5~6V	0.8V		2.0A	SOP8	G5(GMT)
AIC2363	2.5~6V	0.8V		3.2A	SOP8EP	G5(GMT)

- Competitive Price/Performance
- Future product: 4 or 5A; Dual 2A; COT



HV Step-Down (Buck) Series

Part No.	V _{IN}	V _{OUT} (MIN.)	I _{OUT}	Package	Note	P2P Part
AIC2857	4.75~ 23V	0.92V	2.0 A	SOP8 EP	Sync.	MP1(MPS); MP2(MPS) Feeling(FP6);FR9(Fitipower); EUP3(Eutech); ZT7(Zilltek)
AIC2858	4.75~ 23V	0.92V	3.0 A	SOP8 EP	Sync.	MP1(MPS); MP2(MPS) RT8 (Richtek)
AIC2862	4.75~ 23V	0.92V	2.0 A	SOP8 EP	Sync. HLLE	MP1(MPS); RT8(Richtek)
AIC2565 AIC2566	4.75~ 23V	1.22V 0.92V	3.0 A	SOP8 EP	Async.	MP1(MPS); MP2(MPS) CAT7(ITE); RT8(Richtek)

- HLLE: High Light-load Efficiency
- Future product: 4 or 5A; Dual 2A; COT

Part No.	V _{IN}	I _{OUT}	Control Mode	Suggested Package	App;ication
AIC2516 AIC2517	7V~36V	1.2A	DC DC	SOP8 EP; SOT23	MR16 Down Light
AIC6600	5V~70V	15~35mA	Linear	SOP8 EP; TO252	Tube light PAR
AIC6601	5V~70V	60mA		TO252	
AIC6602	50V~500V	30mA		SOP8 EP	
AIC6603	5V~70V	35mA	Constant Current Regulation	TO252-3	Tube light PAR
AIC6604	5V~70V	60mA		TO252-3	
AIC6605	50V~500V	30mA		TO252-5	

- Future product: Dimming; AC/DC



USB Power Switch

Part No.	Continuous Load Current	Channel	External Control	Error Flag	Package
AIC6161	0.5A	1	Y	Y	SOT23-5
AIC6162	0.75A	1	Y	Y	SOT23-5
AIC6163	1.0A	1	Y	Y	SOT23-5
AIC6164	1.5A	1	Y	Y	SOT23-5
AIC6176	0.5A	2	Y	Y	SOP8
AIC6178	1.0A	2	Y	Y	SOP8
AIC6191	0.5A	1	N	N	SOT23
AIC6193	1.0A	1	N	N	SOT23
AIC6196	0.5A	2	N	N	SOT23-5
AIC6198	1.0A	2	N	N	SOT23-5

- AIC619X series are “Bare-Bond USB Switch” and they can replace poly fuses due to better performance.
- Future product: Adjustable current limit