

# ANALOGIC TECH Power Management ICs



AnalogicTech solves the challenges of extending battery life, improving reliability, and reducing the size and weight of new designs with total power management solutions based on innovative analog and mixed-signal integrated circuits. Playing a critical role in system design, these devices manage battery life, voltage regulation, power-saving load switching, and electronic protection of computer input/output. The company's engineering team possesses a unique combination of expertise in analog IC and device design, process technology, packaging, and power management applications.



This product is RoHS compliant.



RoHS Compliant

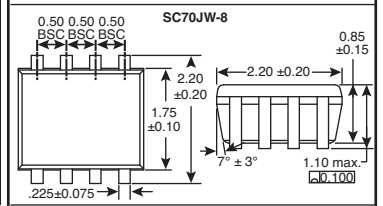
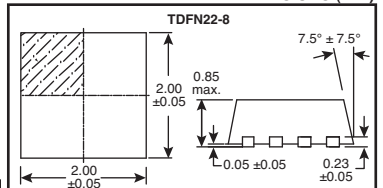
## DC/DC CONVERTERS

AnalogicTech's DC/DC converter products are designed to provide high efficiency voltage regulation in a very small size to extend battery life in portable electronic systems. The SwitchReg™ parts are members of AnalogicTech's Total Power Management IC™ (TPMIC™) product family.

- Features:**
- Soft-start control
  - Over-temperature protection
  - -40°C to +85°C Temperature range

For quantities of 2500 and up, call for quote.

MOUSER STOCK NO.	AATI Part No.	Package Type	VIN (V)	VOUT	Accuracy (%)	Switching Frequency (kHz)	Iout (mA) (max)	Peak Eff. (%)	Price Each			
									1	25	100	1000
873-AAT1142ITP-T1	AAT1142ITP-T1	TSOPJW-12	2.7-5.5	Adj 0.6-2.0	±3	2200	800	93	1.98	1.58	1.42	1.26
873-AAT1171IWP-T1	AAT1171IWP-T1	TDFN33-12	2.7-5.5	Adj 0.6-3.6	±3	2000	600	97	2.35	1.88	1.69	1.50
873-AAT1230ITP-T1	AAT1230ITP-T1	TSOPJW-12	2.7-5.5	Fixed 1.8	±3	2000	100	85	2.55	2.04	1.70	1.26
873-AAT1265JS33T1	AAT1265JS-3.3-T1	SC70JW-8	0.8-Vout	Fixed 2.5-5.0	±3	2000	250	93	2.17	1.74	1.45	.773
873-AAT1146IJS06T1	AAT1146IJS-0.6-T1	SC70JW-8	2.7-5.5	Adj 0.6 to VIN	±3	1400	400	98	1.89	1.58	1.26	.816
873-AAT1121IPS06T1	AAT1121IPS-0.6-T1	TDFN22-8	2.7-5.5	Adj 0.6 to VIN	±3	1500	250	96	1.27	1.01	.79	.76
873-AAT154IAS10T1	AAT1154IAS-1.0-T1	SOP-8	5.5	1.0-4.2	±5	1000	3000	95	2.03	1.62	1.27	1.22
873-AAT1157IVN-T1	AAT1157IVN-T1	QFN33-16	5.5	Fix or Adj>0.8	±4	1000	1200	95	2.54	2.02	1.59	1.53



## LDO LINEAR REGULATORS

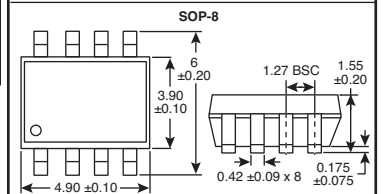
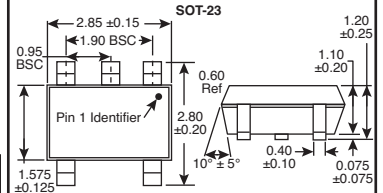
AnalogicTech's LDO linear regulator products are designed to provide a well regulated power supply while maximizing the performance for a given application with minimum board space.

**Features:**

- Cellular phones
- Digital cameras
- Notebook computer
- Portable communication devices
- Low dropout
- Guaranteed 150mA output
- High accuracy

For quantities of 2500 and up, call for quote.

MOUSER STOCK NO.	AATI Part No.	Package Type	VIN (V) (max)	VOUT	Accuracy (%)	Dropout (mV) (Typ)	IGND (A) (Typ)	IOUT (mA) (max)	Price Each			
									1	25	100	1000
873-AAT3215IGV-33T1	AAT3215IGV-3.3-T1	SOT-23	5.5	Fixed 2.5-3.5	±1.5	140	95	150	.54	.43	.34	.33
873-AAT3221IGV-30T1	AAT3221IGV-3.0-T1	SOT-23	5.5	Fixed 1.6-3.5	±2	180	1.1	150	.47	.38	.29	.28
873-AAT3221IGV-33T1	AAT3221IGV-3.3-T1	SOT-23	5.5	Fixed 1.6-3.5	±2	180	1.1	150	.47	.38	.29	.28



## BATTERY MANAGERS

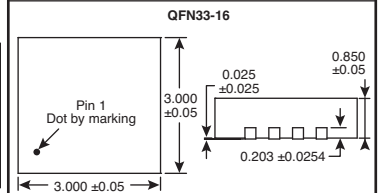
"The AnalogicTech BatteryManagers™ are part of their Total Power Management IC™ (TPMIC™) product family. This product is a highly integrated single cell lithium-ion/polymer battery charger IC that requires a minimum number of external components. BatteryManagers precisely regulate battery charge voltage and current for 4.2V lithium-ion/polymer battery cells.

**Features:**

- Cellular phones
- Digital cameras
- Notebook computer
- Portable communication devices

For quantities of 2500 and up, call for quote.

MOUSER STOCK NO.	AATI Part No.	Package Type	Charge Current (mA) (max)	Iq (sleep) (mA)	Iq (typ) (mA)	VIN (V)	Price Each			
							1	25	100	1000
873-AAT3681IJS42T1	AAT3681IJS-4.2-T1	SC70JW-8	300	0.3	500	4.0-6.5	1.27	1.16	1.07	1.01
873-AAT3685IWP-42T1	AAT3685IWP-4.2-T1	TDFN33-12	1000	0.3	750	4.0-5.5	1.99	1.59	1.25	1.20
873-AAT3686IXN-42T1	AAT3686IXN-4.2-T1	TDFN44-16	1500	0.3	750	4.0-5.5	2.35	2.14	1.99	1.88
873-AAT3687IWP-42T1	AAT3687IWP-4.2-T1	TDFN33-12	1500	0.3	750	4.0-5.5	1.63	1.30	1.02	.98



## INTEGRATED LOAD SWITCHES

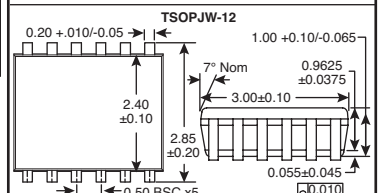
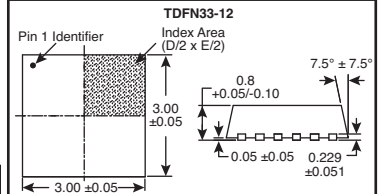
The AAT4250 SmartSwitch is a member of AnalogicTech's Application Specific Power MOSFET (ASPM) product family. It is a Slew Rate Controlled P-channel MOSFET power switch designed for high-side load-switching applications. AnalogicTech's integrated load switching products offer new levels of small size and high integration for power management load switching in portable electronic systems.

**Features:**

- 1.8V to 5.5V Input voltage range
- Low quiescent current
- Only 2.0V needed for ON/OFF control
- Temperature range -40°C to +85°C
- 5kV ESD rating

For quantities of 2500 and up, call for quote.

MOUSER STOCK NO.	AATI Part No.	Package Type	Channel	VIN (V) (max)	IGND (A) (Typ)	RDS(ON) (m) (Typ)	Turn On Rise Time (Tr)	Enable	Price Each			
									1	25	100	1000
873-AAT4250IGV-T1	AAT4250IGV-T1	SOT-23	Single	5.5	2	120	1.5 ms	Yes	.52	.42	.33	.32
873-AAT4285IJS-3-T1	AAT4285IJS-3-T1	SC70JW	Single	3.0-13.2	25	240-380	100	Yes	2.70	2.65	2.60	2.55



## CURRENT LIMITING HIGH SIDE SWITCH

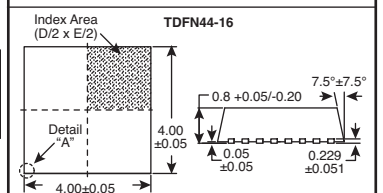
The AAT4610A SmartSwitch is a member of AnalogicTech's Application Specific Power MOSFET (ASPM) product family. It is a Current Limited P-channel MOSFET power switch designed for high-side load-switching applications.

**Features:**

- 2.4V to 5.5V Input voltage range
- Programmable over current threshold
- Limited 2.5V needed for ON/OFF control
- Temperature range: -40°C to +85°C
- Fast transient response
- Low quiescent current
- Under-voltage lockout
- 4kV ESD rating

For quantities of 2500 and up, call for quote.

MOUSER STOCK NO.	AATI Part No.	Package Type	Channel	VIN (V) (max)	IGND (A) (Typ)	RDS(ON) (m) (Typ)	ILM	Enable	Price Each			
									1	25	100	1000
873-AAT4610AIGV-T1	AAT4610AIGV-T1	SOT-23	Single	5.5	15	160	ADJ (1.0A)	Yes	.60	.48	.38	.36



## CHARGE PUMPS

The AAT3125 USB On-the-Go (OTG) charge pump is a member of AnalogicTech's Total Power Management IC product family. The device integrates a high efficiency 1.5x fractional 100mA regulated charge pump for supplying VBUS with the additional functions required for OTG-devices. Four voltage detectors monitor VBUS and a current source, dedicated for VBUS pulsing, are provided for compliance with Session Request Protocol (SRP) as defined by the USB OTG Supplement.

**Features:**

- Under-voltage lockout, output short circuit, & thermal protection.
- Temperature range: -40°C to +85°C
- High efficiency fractional topology
- High frequency 750kHz switching speed

For quantities of 2500 and up, call for quote.

MOUSER STOCK NO.	AATI Part No.	Package Type	Clock Frequency	TSS (µs)	Iq (µA) (Typ)	VIN (V)	VOUT (V)	Price Each			
								1	25	100	1000
873-AAT3193IJQ-1-T1	AAT3193IJQ-1-T1	SC70JW-10TR	900	150	1500	2.7-5.5	-	1.69	1.35	1.06	1.02

