

# Smart Power

[www.ams.com/PMU](http://www.ams.com/PMU)



## Smart Power Management

- Low Noise LDOs
- Step Down & Step Up DC-DC converters
- Programmable start up sequencing
- Strong 1.5 Amp Chargers
- Power Path Management

We provide innovative analog solutions to the most challenging applications in sensor and sensor interfaces, power management, and wireless.

## General Description

ams' line of power management units covers highly integrated, extremely flexible power management units for a portable, battery powered devices. All products come either in BGA or in thermally enhanced QFN packages.

Applications	Benefits
<ul style="list-style-type: none"> <li>- Mobile phones</li> <li>- Portable navigation devices</li> <li>- e-book readers</li> <li>- Portable media players</li> <li>- Tablets</li> </ul>	<ul style="list-style-type: none"> <li>- DC-DC up to 20A current with DVM</li> <li>- Smallest Inductors (0.47μH) by 4MHz DC-DCs</li> <li>- Strong 1.5A Charger, 2.6A power path management</li> <li>- Digital LDOs (0.9-3.3V out, 1.8-5.5V in)</li> <li>- 30V OVP</li> <li>- Ultra low power RTC (&lt;700nA)</li> <li>- Flexible OTP for start-up sequencing</li> <li>- Configurable stand-by mode</li> <li>- Space Saving QFN Packages</li> </ul>

	AS3606/07	AS3608	AS3605	AS3604	AS3710/11	AS3712/13	AS3658	AS3721/29
<b>Power Management</b>								
Special LDOs	ANA-1x100mA, ANA-3/4x250mA	ANA-1x100mA, ANA-4x250mA	RF-4x150mA	RF-3x200mA, RF-2x150mA	ANA-2x250mA	ANA-2x250mA	ANA-1x400mA, ANA-2x150mA	ER-1x300mA, ER-1x300mA
Universal LDOs	-	-	2x250mA	2x250mA	6x300mA	6x300mA	4x200mA	10x300mA
DC-DC Step down Converters	3x700mA or 1.4A + 700mA	3x1A or 2A + 1A	500mA	500mA	1.5A + 2x1A or 1.5A + 2A or 3A + 2A + 1.5A or 3A + 1.5A + 2x1A	1.5A + 2x1A or 1.5A + 2A or 3A + 2A + 1.5A or 3A + 1.5A + 2x1A	3x500mA or 1.6A + 2x500mA or 1.6A + 1A	1x4A 1x2A 2x1.5A 1x5A 1x10A 1x20A
DC-DC Step up Converters	30V	30V	-	15V	3x 50V / 2x 50V	3x 50V / 2x 50V	2x 50V	-
Current Sinks	2x40mA	2x40mA	3x40mA + 2x160mA	4x160mA	3x40mA	3x40mA	3x40mA	-
Charge Pump	-	-	5V/60mA	5V/30mA	-	-	5V/100mA	-
Charger	Linear, 1A	Linear, 1A	Linear, 1A	Linear, 1A	DC-DC/ Linear 1.5A	-	USB + DC-DC/ Linear	-
USB limit / Power Path	Yes / Yes	Yes / Yes	Yes / -	Yes / -	Yes / Yes	-	Yes / Yes	-
USB HOST/OTG	-	-	-	-	-	-	-	-
<b>Audio</b>								
Line / Microphone Input							1 / 1	
Line-Out / HP Amp / SPKR			- / - / 0.5W Stereo	- / - / 0.5W Stereo			1 / 2 / -	
Audio Mixer							Mixer and EQ	
Audio DAC / ADC							96dB/84dB SNR	
<b>Features</b>								
GPIOs	2/4	4	3	3	4	4	4	8
RTC	-	-	-	-	Yes	Yes	Yes	Yes
General Purpose ADC	10 bit	10 bit	-	-	10 bit	10 bit	10 bit	10 bit
Startup Sequences	Programmable	Programmable	Programmable	3x8	Programmable	Programmable	4x8 + Adjustable	Programmable
Package	QFN-32/36 5x5/6x6mm	QFN-36 6x6mm	BGA-100 10x10mm	QFN-48 6x6mm	QFN-56 7x7mm	QFN-56 7x7mm	BGA-124 8x8mm	CTBGA-124 8x8mm

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