



AL7024E

Embedded GSM/GPRS/EDGE Socket Modem with quadband 850/900/1800/1900 Mhz, GPRS multi slot class 10, Class B multiplexing and EDGE.

Benefits:

- Enables any device to send and receive data via quad band 850/900/1800/1900 MHz GSM network.
- Based on Motorola G24E, one of the most compact modules available and ideally suited for a wide range of M2M applications.
- Pin compatible and exchangeable with Analog, ISDN and LAN socket modems from xmodus.
- FTA, FCC, IC, PTCRB, GCF and EMC regulatory approvals. Full approved in Europe, US and other countries.

Functions:

- AT-Command Set Interface Protocol ETSI GSM 07.05, 07.07 and 07.10.
- Dual band 900/1800Mhz
- Class 4 (2W @ 900 MHz)
- Class 1 (1W @ 1800MHz)
- RX sensitivity -106dBm
- GPRS multi slot classes up to Class 10
- GPRS Class B multiplexing.
- GPRS max. BR 85.6 Kbps (CS4)
- CSD max. BR 14.4 Kbps
- Sleep mode < 2.5mA @ DRX9
- SSL Secure connection.
- EDGE multi slot class 10 with max. BR downlink 236.8 Kbps

Connectivity:

- Transparent, V.32bis and V.110 transmission protocols.
- Automatic fax group 3 (Class 1)
- Multiplexing protocol (ETSI 07.10) enables up to 4 virtual channels.
- Embedded TCP/IP UDP/IP and FTP protocol stack.
- SMS services features MO/MT text and PDU modes
- Embedded SMTP / POP3 - email.

Specifications:

- Compact Size: 64.5 X 26.5 X 10 mm.
- 3.3V or 5VDC Supply.
- Typical Power use average: 270mA
- Typical Power use @ PCL 8: 1.5A peak.
- Serial UART interface with TTL levels
- Weight: 22 gram.
- Internal SIM card reader.
- External SIM card reader interface.
- Integrated MMCX Antenna Interface.
- Operating temp.: -20° to +60°
- 2 Year warranty.

Ordering:



AL7024E-5V
AL7024E-3V

Pin Diagram				Pin No	Name	Pin No	Name
1	NC	SPKR	64	1	NC	64	SPEAKER
2	NC	AGND	63	2	NC	63	GND Analog
		MIC	62	3..23	NO PIN	62	MICRO IN
		VCC	61	24	ON / OFF	61	VCC
24	ON / OFF	DGND	41	25	NC	60	NO PIN
25	NC	DTR	40	26	DGND	59	NO PIN
26	DGND	DCD	39	27	GPRS-LED	58	NO PIN
27	GPRS-LED	CTS	38	28	SIMVCC	57	NO PIN
28	SIMVCC	DSR	37	29	TX-LED	56	NO PIN
29	TX-LED	RI	36	30	SIMDATA	55	NO PIN
30	SIMDATA	TXD	35	31	SIMRST	54	NO PIN
31	SIMRST	RXD	34	32	SIMCLK	45...53	NO PIN
32	SIMCLK	RTS	33	33	RTS#	44	NO PIN
				34	RXD#	43	NO PIN
				35	TXD#	42	NO PIN
				36	RI#	41	GND Digital
				37	DSR#	40	DTR#
				38	CTS#	39	DCD#

Operating Conditions	Symbol	Limits	Units
Supply Voltage (-5V Version)	VDD	+ 4.75 to + 5.25	VDC
Supply Voltage (-3V Version)	VDD	+ 3.20 to + 3.60	VDC
Operating temperature (normal operating)	TA	-20° to + 60°	°C
Extended temperature	TA	-30° to + 85°	°C

Power Requirements	Typical Current (mA)	Max. Current (mA)
AL7024E in a call @PCL5	270	305
Average Idle	18,0	20,0
Sleep mode @DRX9	2,0	2,5

Product Documentation	Doc Nr.
Designers Guide	AL7024S-E00-106
AT Command Manual	AL7024S-A00-102
Additional Information	www.xmodus.ch

Contact Information	
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