

无线LSI

工业设备用无线通信LSI

P.86

车载通信用LSI

P.87

工业设备用无线通信LSI

特定小功率无线(Sub-GHz频段无线)

(LAPIS Technology产品)

数据发信专用LSI

Part No.	Support Standard	Frequency Band	Supply Voltage (V)	Modulation Method	FEC Mode	Control I/F	Transmission Rate	Transmission Output (dBm)	Reception Sensitivity	Operating Temperature (°C)	Input Clock	Package	Halogen Free Support*2
ML7386	ARIB STD-T67 RCR STD-30	426MHz band	1.8 to 3.6	2-FSK MSK	-	Synchronous serial (Control) DIO (DATA)	2.4kbps	10mW	-	-25 to +85	-	P-WQFN28 -0404-0.40-63	✓
ML7386B							4.8kbps 7.2kbps	1mW/ 10mW				P-WQFN28 -0404-0.40-63	✓

数据收发信LSI

Part No.	Support Standard	Frequency Band	Supply Voltage (V)	Modulation Method	FEC Mode	Control I/F	Transmission Rate	Transmission Output (dBm)	Reception Sensitivity	Operating Temperature (°C)	Input Clock	Package	Halogen Free Support*2
ML7396D	ARIB STD-T108 EN300-220 IEEE802.15.4g	900 to 960MHz	1.8 to 3.6	2-(G) FSK (G) MSK	IEEE 802.15.4g compliant	Synchronous serial (Control) DIO (DATA)	to 50kbps 100kbps 150kbps 200kbps 400kbps	1mW/ 10mW/ 20mW	-107dBm [100kbps BER=0.1%] ^{*1}	-40 to +85	-	P-WQFN40 -0606-0.50-63	✓
ML7396E	EN300-220 EN1357-4:2011	750 to 900MHz						10mW/ 20mW	-107dBm [100kbps BER=0.1%] ^{*1}			P-WQFN40 -0606-0.50-63	✓
ML7344Jy	ARIB STD-T67 RCR STD-30	160 to 510MHz	1.8 to 3.6	2-(G) FSK (G) MSK	-	Synchronous serial (Control) DIO (DATA)	to 15kbps	1mW/ 10mW/ 20mW	-117dBm [4.8kbps BER=0.1%] ^{*1}	-40 to +85	y= (C) rystal input y= (S) PXO input y= (T) CXO input	P-WQFN32 -0505-0.50-A63	✓
ML7344Cy	Q/GDW374.3		3.3 to 3.6 (100mW)					20mW/ 100mW	-117dBm [4.8kbps BER=0.1%] ^{*1}			P-WQFN32 -0505-0.50-A63	✓
ML7406y	EN300-220 EN1357-4: 2011 IEEE802.15.4g	750 to 960MHz	1.8 to 3.6	2-(G) FSK (G) MSK	-	Synchronous serial (Control) DIO (DATA)	to 500kbps	1mW/ 10mW/ 20mW	-106dBm [100kbps BER=0.1%] ^{*1}	-40 to +85	-	P-WQFN32 -0505-0.50-A63	✓
ML7345	ARIB STD-T67 ARIB STD-T108 RCR STD-30	160 to 960MHz							-123dBm [2.4kbps BER=1%] ^{*1}			P-WQFN32 -0505-0.50-A63	✓
ML7345D	EN300-220 EN13757-4: 2013 IEEE802.15.4g	315 to 960MHz	3.3 to 3.6 (100mW)	2-(G) FSK (G) MSK 4-(G) FSK	-	Synchronous serial (Control) DIO (DATA)	to 100kbps	20mW/ 100mW	-119.5dBm [2.4kbps BER=1%] ^{*1}	-40 to +85	-	P-WQFN32 -0505-0.50-A63	✓
ML7345C	Q/GDW374.3	470 to 510MHz							-123dBm [2.4kbps BER=1%] ^{*1}			P-WQFN32 -0505-0.50-A63	✓
ML7414	ARIB STD-T67 ARIB STD-T108 Sigfox® (Rev 2.E) RCR STD-30 EN300-220 EN13757-4: 2013 IEEE802.15.4g	315 to 960MHz	1.8 to 3.6	2-(G) FSK (G) MSK 4-(G) FSK BPSK (TX only)	IEEE 802.15.4g compliant	Synchronous serial (Control) DIO (DATA)	1mW/ 10mW/ 20mW	-106dBm [100kbps BER=1%] ^{*1}	-40 to +85	-	-	P-WQFN32 -0505-0.50-A63	✓

*1 BER是Bit Error Rate的缩写。

*2 带无卤素标记✓, 表示备有无卤素产品。详细内容请咨询销售人员。

Sigfox®是SIGFOX S.A.的注册商标。

LPWA无线

(LAPIS Technology产品)

数据收发信LSI

Part No.	Supported Standard	Frequency Band	Supply Voltage (V)	Modulation Method	FEC Mode	Control Interface	CPU core	Memory resources	Transmission Rate	Transmission Output (dBm)	Reception Sensitivity	Operating Temperature (°C)	Package	Halogen Free Support*2
ML7404	ARIB STD-T67 ARIB STD-T108 RCR STD-30 EN300-220 EN13757-4: 2013 Sigfox® (Rev 2.E) IEEE802.15.4k IEEE802.15.4g	315 to 960MHz	1.8 to 3.6	2-(G) FSK (G) MSK 4-(G) MSK BPSK (DSSS)	IEEE 802.15.4k compliant	Synchronous serial (Control) DIO (DATA)	-	-	to 100kbps (xFSK) 80k to 200kcp (DSSS)	1mW/ 10mW/ 20mW	-119.5dBm [2.4kbps BER=1%] ^{*1}	-40 to +85	P-WQFN32 -0505-0.50-A63	✓
ML7414	ARIB STD-T67 ARIB STD-T108 Sigfox® (Rev 2.E) RCR STD-30 EN300-220 EN13757-4: 2013 IEEE802.15.4g			2-(G) FSK (G) MSK 4-(G) FSK (G) MSK BPSK (TX only)	IEEE 802.15.4g compliant		-	-	to 100kbps		-106dBm [100kbps BER=1%] ^{*1}		P-WQFN32 -0505-0.50-A63	✓
New ML7446N	ARIB STD-T67 ARIB STD-T108 Sigfox® (Rev 2.E) RCR STD-30 EN300-220 EN13757-4: 2013 IEEE802.15.4g	315 to 960MHz	2.6 to 3.6	2-(G) FSK (G) MSK 4-(G) FSK BPSK (TX only)	IEEE 802.15.4g compliant	Synchronous serial (Control) DIO (DATA)	Cortex®-M3 (to 81MHz)	FLASH1024KB, RAM256KB	0.1k to 100kbps	1mW/ 10mW/ 20mW	-106dBm [100kbps BER=1%] ^{*1}	-40 to +85	P-TFPGA81 -6.5x6.5-0.65-9-MC	✓

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搭载MCU的特定小功率无线(Sub-GHz频段无线&2.4GHz频段无线)系统LSI

(LAPIS Technology产品)

数据收发信LSI												
Part No.	Support Standard	Frequency Band	Supply Voltage (V)	Modulation Method	CPU core	Memory resources	Transmission Rate	Transmission Output (dBm)	Reception Sensitivity	Operating Temperature (°C)	Package	Halogen Free Support*2
ML7416N	ARIB STD-T108 IEEE802.15.4g	750 to 960MHz	1.8 to 3.6	2- (G) FSK (G) MSK	Cortex®-M0+ (to 40MHz)	FLASH512KB, RAM64KB	to 50kbps 100kbps 150kbps 200kbps 400kbps	1mW/ 10mW/ 20mW	-106dBm [100kbps BER=0.1%]*1	-40 to +85	P-LFBGA81 -1010-1.00-1-MC	✓
ML7436N	ARIB STD-T66 ARIB STD-T67 ARIB STD-T108 EN300-220 FCC part15 IEEE802.15.4g	400 to 960MHz 2.4GHz	2.6 to 3.6	2- (G) FSK (G) MSK 4- (G) FSK	Cortex®-M3 (to 81MHz)	FLASH1024KB, RAM256KB	1.2k to 300kbps		-107dBm [100kbps BER=1%]*1		P-TQFP48 -0707-0.50-29K6-MC	✓

Cortex®是ARM Limited(或其子公司)在EU或在其他国家的注册商标。
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车载通信用LSI

FM数字广播接收用LSI

(LAPIS Technology产品)

FM数字广播接收调谐器								
Part No.	Feature	Supply Voltage (V)	Supply Current (Max) (mA)	Operating Temperature (°C)	Package	Halogen Free Support*1	Automotive Grade*2	
ML7174 [J]	FM VICS® tuner, FM multiplexing demodulate LSI for VICS®, Built-in BPF, frame memory, and VICS® descrambler, Frames A,B,C, SPI slave	3.0 to 3.6	85	-40 to +85	P-WQFN64 -0909-0.50-63	✓	YES	
ML7183 [J]	FM VICS® tuner & Filter LSI, BPF, I²C slave		75			✓	YES	
支持VICS® FM多重解调								
ML7154 [J]	VICS® compliant FM multiplexing demodulate LSI for VICS®, Built-in BPF, frame memory, and VICS® descrambler, Frames A,B,C, SPI slave	3.0 to 3.6	28	-40 to +85	P-WQFN64 -0909-0.50-63	✓	YES	

[J]: 此LSI仅在日本市场销售。
VICS®是美国Vehicle Information and Communication System Center的注册商标。
*1 带无卤素标记 ✓, 表示备有无卤素产品。详细内容请咨询销售人员。
*2 关于AEC-Q100, 请咨询销售人员。