

IrDA® PROTOCOL IC COMPARISON (v2.00, 2011/09/14)
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(ACTiSYS ACT-IR8250P/IR826xD/IR82x0D and Microchip MCP2150)

		ACT-IR8250P	M C P 2 1 5 0	ACT-IR8260D	ACT-IR8261D	ACT-IR8210D	ACT-IR8200D
Compatibility	Windows XP /Vista/Win7	All Compatible	Yes	All Compatible			
	Palm O.S.	All Compatible	Not All	All Compatible			
	Windows CE & Pocket PC	All Compatible	Not All	All Compatible			
	Symbian O.S.	IrComm Compatible	Not Sure?	Compatible			
Certificate	**IrDA® -IrReady™ Certified	Yes, in Embedded RS232 Adapter	No	Yes, in Embedded USB Adapter		Yes, in Embedded RS232/USB Adapter	
	**Your Product To Pass Certification	Yes, Quickly	No	Yes, Quickly			
IrDA Protocol Stack	IrDA Protocol Lower Layers	Same	Same	Same			
	IrDA Protocol Upper Layers	IrComm, IrLPT, IrObex Transport	IrComm only	IrComm, IrLPT, Obex*		IrComm, IrLPT, IrObex Transport	IrComm, IrLPT, IrObex Transport, Obex*
	Primary-mode; Secondary-mode	Secondary only	2ndary only	Primary, 2ndary; or Primary+2ndry			
	IrDA Baud Rate	9.6k – 115.2k bps	Same	Same			
	Frame Size/Packet	64 bytes	64 bytes	512 bytes	1,024 bytes	512 bytes	1,024 bytes
	Protocol & Host Parameters Select	Customer Selectable	Not Selectable	Customer Selectable by Software			
Host Interface	Host Interface Select Data Format	Customer Selectable: 8n1, 8e1, 8o1, 7e1, 7o1, 8n2, 7e2, 7o2	Not Selectable. 8n1 only??	Default 8N1; Else customized order			
	UART Rate	300~115.2kbps	1.2k~115.2k	1.2k~115.2kbps			
	Flow-Control	Hardware, extra 4 bytes tolerance	Hardware	Hardware, extra 100 bytes tolerance		Hardware, extra 4 bytes tolerance	

Remark: * **Please contact our Tech-Support before placing order for Obex customization.**

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		ACT-IR8250P	M C P 2 1 5 0	ACT-IR8260D	ACT-IR8261D	ACT-IR8210D	ACT-IR8200D
	Throughput	Average	Very Slow	Medium		Medium	Fast
	DCE, DTE	Same chip	M C P 2 1 5 5 : D T E	Same chip			
Special Feature	Firmware Customization	Yes, Special Order	No	Yes, Special Order			
	AES Encryption	Special Order	No	Yes, Special order		No	
	Firmware Field Programmable	Yes	No	Yes, Special order			
Electrical Spec.	Operating Vcc	3V-3.6V	3V-5V	3V-3.6V			
	Active Pwr	2 mA, 3.3V	4 mA, 5V	8.8 mA, 3.3V		15 mA, 3.3V	
	Standby Pwr	2 µA	<1mA 5V	105 µA		2 mA	
	Crystal Freq.	7.3728MHz	11.0592 MHz	14.7456 MHz		22.1184 MHz	
	Endec Xstal Freq.	No Need	No Need	No Need			
	On-Chip SRAM	256 bytes	256 bytes ?	4K bytes/4 blocks	8K bytes/4 blocks	4K bytes/4 blocks	8K bytes/4 blocks
	IrDA Xsmit Pwr	<100 mA	<100 mA	<100 mA			
	Programming SW	Free IR8250SW	No	Free ComSET			
Package	Form Factor	IC & PCB Module	IC only	IC & PCB Module			
	Chip Set	Single IC	Single IC	Single IC			
	Package	28 Pin TSSOP	20 Pin	64 Pin QFP		52 Pin QFP	
\$	Price	Low	Low	Medium	Medium High	Medium	Medium High
	Adapter & Voltage	IR8250PEK;3/5/12V	Eval. kit	IR100UD-v2; 5V from USB		IR100SD,5V; IR100UD, 5V from USB	

Remark****IrReady Certification** assures: a) reliable error-free IR data transfer, b) solid compatibility with other IrReady certified IrDA devices, c) strong immunity to interference. “**IrReady Certified Products**” are listed at <http://www.irda.org/displaycommon.cfm?an=1&subarticlenbr=22>. **IrReady Certification** requires passing: a) **IrPHY (Bit Error Rate, Intensity, Sensitivity, Timing)**, b) **IrDA Protocol tough tests**.