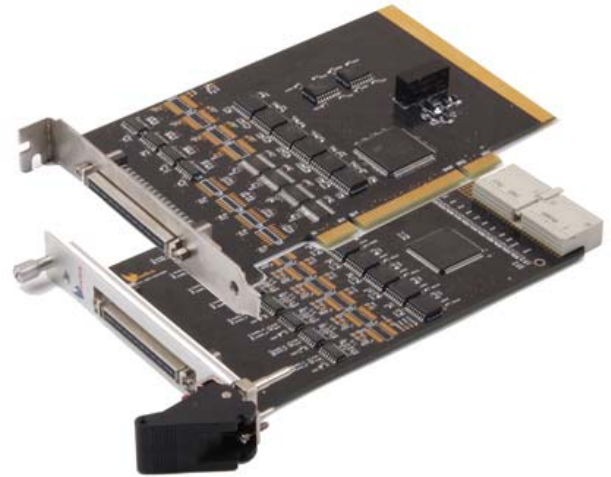


HT-UART

UART 串口通讯板卡



简介

北京豪恩科技有限责任公司自主研发设计的HT-UART系列串口通讯板卡，可以为PC机的数据采集系统提供更多的串口设备。该系列产品具备宽温、突波保护、带隔离等特点，严峻环境下同样适用。

本系列板卡包括PCI以及CPCI/PXI两种接口类型；每个板卡高密度集成8路通道，也可根据客户需要，定制为4通道卡，以提供8或4个独立的RS232、RS422、RS485串行口；此外，串口还可以配置成RS232/RS422、RS232/RS485的复合类型。灵活的定制方案，可靠的连接质量，极大地满足客户的个性化应用要求。

特点

- 8口RS-232/422/485高速通讯卡，可定制通道数量
- PCI、CPCI多种接口选择
- 数据传输速率可调节，最高可达1.5Mbps
- 板载硬件流控
- 可选择串口混合设置
- 可选择突波保护和隔离，隔离保护2KV
- 宽温，-40℃到+85℃正常工作

串口通讯速率

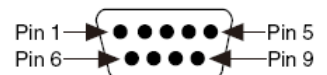
根据晶振频率不同，共有2组速率可供选择：

晶振频率 (24MHz)	晶振频率 (14.7456MHz)
1500000	921600
750000	460800
500000	307200
375000	230400
300000	184320
250000	153600
214285.7143	131657.1429
187500	115200
166666.6667	102400
150000	92160
136363.6364	83781.81818
125000	76800
115384.6154	70892.30769
107142.8571	65828.57143
.....
串口标准波特率均支持	串口标准波特率均支持

文档附支持的波特率详细列表

RS232/422/485针脚分布

DB-9 Male



Pin	232	422/485
1	DCD	GND
2	TXD	CTS+ (HSI+)
3	RXD	RTS+ (HSO+)
4	DSR	RXD+
5	GND	RXD-
6	DTR	CTS- (HSI-)
7	CTS	RTS- (HSO-)
8	RTS	TXD+
9	RI	TXD-



规格

硬件

接口: PCI ver. 2.1 (32bit) (8口 RS-232/422/485), SCSI68孔式连接

性能

速率: 50bps ~ 1.5Mbps
具体速率, 参见上页详表

配置

校验位: None, Even, Odd, Space, Mark

数据位: 5, 6, 7, 8

停止位: 1, 1.5, 2

中断: 通过BIOS分配

软件

支持Windows 2003/XP/2000/ME/NT, Linux, DOS

电源需求

720 mA max. (+5V)

43 mA max. (+12V)

31 mA max. (-12V)

尺寸

(160mm×100mm)

环境要求

工作温度: -40°C到+85°C

储存温度: -50°C到+105°C

操作湿度: 5到95% RH

其他特点

隔离保护: 2KV

订货信息

HT-UART-A-B-C:

A: 接口类型, B: 串口类型, C: 串口通道数目。

1) 接口类型:

PCI——PCI接口

CPCI——CPCI接口, 兼容PXI

2) 串口类型:

A——RS232

B——RS422

C——RS485

AB——RS232/RS422

AC——RS232/RS485

3) 串口通道数:

8——8路通道

4——4路通道

88——两种类型串口, 对应通道分别为8路和8路

关于豪恩科技

北京豪恩科技有限责任公司提供多种航空电子产品以及解决方案。公司在Mil-Std-1553, Arinc429, 有完善的产品线。同时公司为客户设计, 定制军用加固计算机, 信号处理板以及多种军用的以及工业用的IO, AD, 通讯板卡。豪恩科技公司总部在北京。想了解更多信息请访问公司网站<http://www.horntech.cn>。

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支持的波特率详细列表

Baud Rates
(14.7456MHz)

Baud Rates (24MHz)

Divisor	8XMODE = 0	8XMODE = 1	8XMODE = 0	8XMODE = 1
1	921600	1843200	1500000	3000000
2	460800	921600	750000	1500000
3	307200	614400	500000	1000000
4	230400	460800	375000	750000
5	184320	368640	300000	600000
6	153600	307200	250000	500000
7	131657.1429	263314.2857	214285.7143	428571.4286
8	115200	230400	187500	375000
9	102400	204800	166666.6667	333333.3333
10	92160	184320	150000	300000
11	83781.81818	167563.6364	136363.6364	272727.2727
12	76800	153600	125000	250000
13	70892.30769	141784.6154	115384.6154	230769.2308
14	65828.57143	131657.1429	107142.8571	214285.7143
15	61440	122880	100000	200000
16	57600	115200	93750	187500
17	54211.76471	108423.5294	88235.29412	176470.5882
18	51200	102400	83333.33333	166666.6667
19	48505.26316	97010.52632	78947.36842	157894.7368
20	46080	92160	75000	150000
21	43885.71429	87771.42857	71428.57143	142857.1429
22	41890.90909	83781.81818	68181.81818	136363.6364
23	40069.56522	80139.13043	65217.3913	130434.7826
24	38400	76800	62500	125000
25	36864	73728	60000	120000
26	35446.15385	70892.30769	57692.30769	115384.6154
27	34133.33333	68266.66667	55555.55556	111111.1111
28	32914.28571	65828.57143	53571.42857	107142.8571
29	31779.31034	63558.62069	51724.13793	103448.2759
30	30720	61440	50000	100000
31	29729.03226	59458.06452	48387.09677	96774.19355
32	28800	57600	46875	93750
33	27927.27273	55854.54545	45454.54545	90909.09091
34	27105.88235	54211.76471	44117.64706	88235.29412
35	26331.42857	52662.85714	42857.14286	85714.28571
36	25600	51200	41666.66667	83333.33333
37	24908.10811	49816.21622	40540.54054	81081.08108
38	24252.63158	48505.26316	39473.68421	78947.36842
39	23630.76923	47261.53846	38461.53846	76923.07692
40	23040	46080	37500	75000
41	22478.04878	44956.09756	36585.36585	73170.73171

42	21942.85714	43885.71429	35714.28571	71428.57143
43	21432.55814	42865.11628	34883.72093	69767.44186
44	20945.45455	41890.90909	34090.90909	68181.81818
45	20480	40960	33333.33333	66666.66667
46	20034.78261	40069.56522	32608.69565	65217.3913
47	19608.51064	39217.02128	31914.89362	63829.78723
48	19200	38400	31250	62500
49	18808.16327	37616.32653	30612.2449	61224.4898
50	18432	36864	30000	60000
51	18070.58824	36141.17647	29411.76471	58823.52941
52	17723.07692	35446.15385	28846.15385	57692.30769
53	17388.67925	34777.35849	28301.88679	56603.77358
54	17066.66667	34133.33333	27777.77778	55555.55556
55	16756.36364	33512.72727	27272.72727	54545.45455
56	16457.14286	32914.28571	26785.71429	53571.42857
57	16168.42105	32336.84211	26315.78947	52631.57895
58	15889.65517	31779.31034	25862.06897	51724.13793
59	15620.33898	31240.67797	25423.72881	50847.45763
60	15360	30720	25000	50000
61	15108.19672	30216.39344	24590.16393	49180.32787
62	14864.51613	29729.03226	24193.54839	48387.09677
63	14628.57143	29257.14286	23809.52381	47619.04762
64	14400	28800	23437.5	46875
65	14178.46154	28356.92308	23076.92308	46153.84615
66	13963.63636	27927.27273	22727.27273	45454.54545
67	13755.22388	27510.44776	22388.0597	44776.1194
68	13552.94118	27105.88235	22058.82353	44117.64706
69	13356.52174	26713.04348	21739.13043	43478.26087
70	13165.71429	26331.42857	21428.57143	42857.14286
71	12980.28169	25960.56338	21126.76056	42253.52113
72	12800	25600	20833.33333	41666.66667
73	12624.65753	25249.31507	20547.94521	41095.89041
74	12454.05405	24908.10811	20270.27027	40540.54054
75	12288	24576	20000	40000
76	12126.31579	24252.63158	19736.84211	39473.68421
77	11968.83117	23937.66234	19480.51948	38961.03896
78	11815.38462	23630.76923	19230.76923	38461.53846
79	11665.82278	23331.64557	18987.34177	37974.68354
80	11520	23040	18750	37500
81	11377.77778	22755.55556	18518.51852	37037.03704
82	11239.02439	22478.04878	18292.68293	36585.36585
83	11103.61446	22207.22892	18072.28916	36144.57831
84	10971.42857	21942.85714	17857.14286	35714.28571
85	10842.35294	21684.70588	17647.05882	35294.11765
86	10716.27907	21432.55814	17441.86047	34883.72093
87	10593.10345	21186.2069	17241.37931	34482.75862
88	10472.72727	20945.45455	17045.45455	34090.90909
89	10355.05618	20710.11236	16853.93258	33707.86517

90	10240	20480	16666.66667	33333.33333
91	10127.47253	20254.94505	16483.51648	32967.03297
92	10017.3913	20034.78261	16304.34783	32608.69565
93	9909.677419	19819.35484	16129.03226	32258.06452
94	9804.255319	19608.51064	15957.44681	31914.89362
95	9701.052632	19402.10526	15789.47368	31578.94737
96	9600	19200	15625	31250
97	9501.030928	19002.06186	15463.91753	30927.83505
98	9404.081633	18808.16327	15306.12245	30612.2449
99	9309.090909	18618.18182	15151.51515	30303.0303
100	9216	18432	15000	30000
101	9124.752475	18249.50495	14851.48515	29702.9703
102	9035.294118	18070.58824	14705.88235	29411.76471
103	8947.572816	17895.14563	14563.1068	29126.21359
104	8861.538462	17723.07692	14423.07692	28846.15385
105	8777.142857	17554.28571	14285.71429	28571.42857
106	8694.339623	17388.67925	14150.9434	28301.88679
107	8613.084112	17226.16822	14018.69159	28037.38318
108	8533.333333	17066.66667	13888.88889	27777.77778
109	8455.045872	16910.09174	13761.46789	27522.93578
110	8378.181818	16756.36364	13636.36364	27272.72727
111	8302.702703	16605.40541	13513.51351	27027.02703
112	8228.571429	16457.14286	13392.85714	26785.71429
113	8155.752212	16311.50442	13274.33628	26548.67257
114	8084.210526	16168.42105	13157.89474	26315.78947
115	8013.913043	16027.82609	13043.47826	26086.95652
116	7944.827586	15889.65517	12931.03448	25862.06897
117	7876.923077	15753.84615	12820.51282	25641.02564
118	7810.169492	15620.33898	12711.86441	25423.72881
119	7744.537815	15489.07563	12605.04202	25210.08403
120	7680	15360	12500	25000
121	7616.528926	15233.05785	12396.69421	24793.38843
122	7554.098361	15108.19672	12295.08197	24590.16393
123	7492.682927	14985.36585	12195.12195	24390.2439
124	7432.258065	14864.51613	12096.77419	24193.54839
125	7372.8	14745.6	12000	24000
126	7314.285714	14628.57143	11904.7619	23809.52381
127	7256.692913	14513.38583	11811.02362	23622.04724
128	7200	14400	11718.75	23437.5
129	7144.186047	14288.37209	11627.90698	23255.81395
130	7089.230769	14178.46154	11538.46154	23076.92308
131	7035.114504	14070.22901	11450.38168	22900.76336
132	6981.818182	13963.63636	11363.63636	22727.27273
133	6929.323308	13858.64662	11278.19549	22556.39098
134	6877.61194	13755.22388	11194.02985	22388.0597
135	6826.666667	13653.33333	11111.11111	22222.22222
136	6776.470588	13552.94118	11029.41176	22058.82353
137	6727.007299	13454.0146	10948.90511	21897.81022

138	6678.26087	13356.52174	10869.56522	21739.13043
139	6630.215827	13260.43165	10791.36691	21582.73381
140	6582.857143	13165.71429	10714.28571	21428.57143
141	6536.170213	13072.34043	10638.29787	21276.59574
142	6490.140845	12980.28169	10563.38028	21126.76056
143	6444.755245	12889.51049	10489.51049	20979.02098
144	6400	12800	10416.66667	20833.33333
145	6355.862069	12711.72414	10344.82759	20689.65517
146	6312.328767	12624.65753	10273.9726	20547.94521
147	6269.387755	12538.77551	10204.08163	20408.16327
148	6227.027027	12454.05405	10135.13514	20270.27027
149	6185.234899	12370.4698	10067.11409	20134.22819
150	6144	12288	10000	20000
151	6103.311258	12206.62252	9933.774834	19867.54967
152	6063.157895	12126.31579	9868.421053	19736.84211
153	6023.529412	12047.05882	9803.921569	19607.84314
154	5984.415584	11968.83117	9740.25974	19480.51948
155	5945.806452	11891.6129	9677.419355	19354.83871
156	5907.692308	11815.38462	9615.384615	19230.76923
157	5870.063694	11740.12739	9554.140127	19108.28025
158	5832.911392	11665.82278	9493.670886	18987.34177
159	5796.226415	11592.45283	9433.962264	18867.92453
160	5760	11520	9375	18750
161	5724.223602	11448.4472	9316.770186	18633.54037
162	5688.888889	11377.77778	9259.259259	18518.51852
163	5653.98773	11307.97546	9202.453988	18404.90798
164	5619.512195	11239.02439	9146.341463	18292.68293
165	5585.454545	11170.90909	9090.909091	18181.81818
166	5551.807229	11103.61446	9036.144578	18072.28916
167	5518.562874	11037.12575	8982.035928	17964.07186
168	5485.714286	10971.42857	8928.571429	17857.14286
169	5453.254438	10906.50888	8875.739645	17751.47929
170	5421.176471	10842.35294	8823.529412	17647.05882
171	5389.473684	10778.94737	8771.929825	17543.85965
172	5358.139535	10716.27907	8720.930233	17441.86047
173	5327.16763	10654.33526	8670.520231	17341.04046
174	5296.551724	10593.10345	8620.689655	17241.37931
175	5266.285714	10532.57143	8571.428571	17142.85714
176	5236.363636	10472.72727	8522.727273	17045.45455
177	5206.779661	10413.55932	8474.576271	16949.15254
178	5177.52809	10355.05618	8426.966292	16853.93258
179	5148.603352	10297.2067	8379.888268	16759.77654
180	5120	10240	8333.333333	16666.66667
181	5091.712707	10183.42541	8287.292818	16574.58564
182	5063.736264	10127.47253	8241.758242	16483.51648
183	5036.065574	10072.13115	8196.721311	16393.44262
184	5008.695652	10017.3913	8152.173913	16304.34783
185	4981.621622	9963.243243	8108.108108	16216.21622

186	4954.83871	9909.677419	8064.516129	16129.03226
187	4928.342246	9856.684492	8021.390374	16042.78075
188	4902.12766	9804.255319	7978.723404	15957.44681
189	4876.190476	9752.380952	7936.507937	15873.01587
190	4850.526316	9701.052632	7894.736842	15789.47368
191	4825.13089	9650.26178	7853.403141	15706.80628
192	4800	9600	7812.5	15625
193	4775.129534	9550.259067	7772.020725	15544.04145
194	4750.515464	9501.030928	7731.958763	15463.91753
195	4726.153846	9452.307692	7692.307692	15384.61538
196	4702.040816	9404.081633	7653.061224	15306.12245
197	4678.172589	9356.345178	7614.213198	15228.4264
198	4654.545455	9309.090909	7575.757576	15151.51515
199	4631.155779	9262.311558	7537.688442	15075.37688
200	4608	9216	7500	15000
201	4585.074627	9170.149254	7462.686567	14925.37313
202	4562.376238	9124.752475	7425.742574	14851.48515
203	4539.901478	9079.802956	7389.162562	14778.32512
204	4517.647059	9035.294118	7352.941176	14705.88235
205	4495.609756	8991.219512	7317.073171	14634.14634
206	4473.786408	8947.572816	7281.553398	14563.1068
207	4452.173913	8904.347826	7246.376812	14492.75362
208	4430.769231	8861.538462	7211.538462	14423.07692
209	4409.569378	8819.138756	7177.033493	14354.06699
210	4388.571429	8777.142857	7142.857143	14285.71429
211	4367.772512	8735.545024	7109.004739	14218.00948
212	4347.169811	8694.339623	7075.471698	14150.9434
213	4326.760563	8653.521127	7042.253521	14084.50704
214	4306.542056	8613.084112	7009.345794	14018.69159
215	4286.511628	8573.023256	6976.744186	13953.48837
216	4266.666667	8533.333333	6944.444444	13888.88889
217	4247.004608	8494.009217	6912.442396	13824.88479
218	4227.522936	8455.045872	6880.733945	13761.46789
219	4208.219178	8416.438356	6849.315068	13698.63014
220	4189.090909	8378.181818	6818.181818	13636.36364
221	4170.135747	8340.271493	6787.330317	13574.66063
222	4151.351351	8302.702703	6756.756757	13513.51351
223	4132.735426	8265.470852	6726.457399	13452.9148
224	4114.285714	8228.571429	6696.428571	13392.85714
225	4096	8192	6666.666667	13333.33333
226	4077.876106	8155.752212	6637.168142	13274.33628
227	4059.911894	8119.823789	6607.929515	13215.85903
228	4042.105263	8084.210526	6578.947368	13157.89474
229	4024.454148	8048.908297	6550.218341	13100.43668
230	4006.956522	8013.913043	6521.73913	13043.47826
231	3989.61039	7979.220779	6493.506494	12987.01299
232	3972.413793	7944.827586	6465.517241	12931.03448
233	3955.364807	7910.729614	6437.76824	12875.53648

234	3938.461538	7876.923077	6410.25641	12820.51282
235	3921.702128	7843.404255	6382.978723	12765.95745
236	3905.084746	7810.169492	6355.932203	12711.86441
237	3888.607595	7777.21519	6329.113924	12658.22785
238	3872.268908	7744.537815	6302.521008	12605.04202
239	3856.066946	7712.133891	6276.150628	12552.30126
240	3840	7680	6250	12500
241	3824.06639	7648.13278	6224.06639	12448.13278
242	3808.264463	7616.528926	6198.347107	12396.69421
243	3792.592593	7585.185185	6172.839506	12345.67901
244	3777.04918	7554.098361	6147.540984	12295.08197
245	3761.632653	7523.265306	6122.44898	12244.89796
246	3746.341463	7492.682927	6097.560976	12195.12195
247	3731.174089	7462.348178	6072.874494	12145.74899
248	3716.129032	7432.258065	6048.387097	12096.77419
249	3701.204819	7402.409639	6024.096386	12048.19277
250	3686.4	7372.8	6000	12000
251	3671.713147	7343.426295	5976.095618	11952.19124
252	3657.142857	7314.285714	5952.380952	11904.7619
253	3642.687747	7285.375494	5928.853755	11857.70751
254	3628.346457	7256.692913	5905.511811	11811.02362
255	3614.117647	7228.235294	5882.352941	11764.70588
256	3600	7200	5859.375	11718.75