

USB-DIO12800

128 channel highly integrated digital IO board



INTRODUCTION

The USB-DIO12800 is designed for high speed Digital Data Logger with USB 2.0 interface. It composes of 128 bits I/O port and interfaces for external. It should use with a daughter board DIO128-JIG board which can control a lot of channels for external interface. It can be programmable the input and output channels.

GENERAL DESCRIPTION

- ◆ USB2.0 Device Specification
- ◆ Full Speed(12Mbps) device
- ◆ UBS Bus Powered
- ◆ 128bit general purpose I/O, Direction control grouped by 16bit.

APPLICATION

- ◆ Data acquisition
- ◆ Laboratory instrumentation
- ◆ Process control systems

SOFTWARE

▣ Operating System

- Windows 2000/XP/7 (32/64bit)

▣ Support

- Visual basic/C++ with Board API(DLL)

SPECIFICATION

▣ Digital Input/Output

- Number of Channels : 128
- Maximum Transfer Speed : 100hz
- Selectable Read/Write to 16bit each 8 groups
- Bulk Data Transfer
- 5V tolerance Logic Input
- 3.3V CMOS output

PHYSICAL/ENVIRONMENTAL

■ **Dimension**

- Host Connector : USB B-type connector
- I/O Connector : 2.54-pitch 80-pin Header
- Dimension (including connectors) : 117mm x 72mm

J1		
+5VUSB	① ②	+5VUSB
+3.3V	③ ④	+3.3V
N.C	⑤ ⑥	N.C
N.C	⑦ ⑧	N.C
LD_0	⑨ ⑩	LD_1
LD_2	⑪ ⑫	LD_3
LD_4	⑬ ⑭	LD_5
LD_6	⑮ ⑯	LD_7
LD_8	⑰ ⑱	LD_9
LD_10	⑲ ⑳	LD_11
LD_12	㉑ ㉒	LD_13
LD_14	㉓ ㉔	LD_15
GND	㉕ ㉖	GND
LD_16	㉗ ㉘	LD_17
LD_18	㉙ ㉚	LD_19
LD_20	㉛ ㉜	LD_21
LD_22	㉝ ㉞	LD_23
LD_24	㉟ ㊱	LD_25
LD_26	㊲ ㊳	LD_27
LD_28	㊴ ㊵	LD_29
LD_30	㊶ ㊷	LD_31
GND	㊸ ㊹	GND
LD_32	㊺ ㊻	LD_33
LD_34	㊼ ㊽	LD_35
LD_36	㊾ ㊿	LD_37
LD_38	① ②	LD_39
LD_40	③ ④	LD_41
LD_42	⑤ ⑥	LD_43
LD_44	⑦ ⑧	LD_45
LD_46	⑨ ⑩	LD_47
GND	⑪ ⑫	GND
LD_48	⑬ ⑭	LD_49
LD_50	⑮ ⑯	LD_51
LD_52	⑰ ⑱	LD_53
LD_54	⑲ ⑳	LD_55
LD_56	㉑ ㉒	LD_57
LD_58	㉓ ㉔	LD_59
LD_60	㉕ ㉖	LD_61
LD_62	㉗ ㉘	LD_63
GND	㉙ ㉚	GND

J4		
+5VUSB	① ②	+5VUSB
+3.3V	③ ④	+3.3V
N.C	⑤ ⑥	N.C
N.C	⑦ ⑧	N.C
LD_126	⑨ ⑩	LD_127
LD_124	⑪ ⑫	LD_125
LD_122	⑬ ⑭	LD_123
LD_120	⑮ ⑯	LD_121
LD_118	⑰ ⑱	LD_119
LD_116	⑲ ⑳	LD_117
LD_114	㉑ ㉒	LD_115
LD_112	㉓ ㉔	LD_113
GND	㉕ ㉖	GND
LD_110	㉗ ㉘	LD_111
LD_108	㉙ ㉚	LD_109
LD_106	㉛ ㉜	LD_107
LD_104	㉝ ㉞	LD_105
LD_102	㉟ ㊱	LD_103
LD_100	㊲ ㊳	LD_101
LD_98	㊴ ㊵	LD_99
LD_96	㊶ ㊷	LD_97
GND	㊸ ㊹	GND
LD_94	㊺ ㊻	LD_95
LD_92	㊼ ㊽	LD_93
LD_90	㊾ ㊿	LD_91
LD_88	① ②	LD_89
LD_86	③ ④	LD_87
LD_84	⑤ ⑥	LD_85
LD_82	⑦ ⑧	LD_83
LD_80	⑨ ⑩	LD_81
GND	⑪ ⑫	GND
LD_78	⑬ ⑭	LD_79
LD_76	⑮ ⑯	LD_77
LD_74	⑰ ⑱	LD_75
LD_72	⑲ ⑳	LD_73
LD_70	㉑ ㉒	LD_71
LD_68	㉓ ㉔	LD_69
LD_66	㉕ ㉖	LD_67
LD_64	㉗ ㉘	LD_65
GND	㉙ ㉚	GND

▣ **Temperature**

- 0 to 60°C, Operating
- -20 to 80°C Storage

▣ **Relative Humidity**

- 5 to 95%, Non-considering

▣ **Power Requirement**

- +5VDC(±5%) at Max. 250mA

BLOCK DIAGRAM

