

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Measurement Computing / IOtech DBK20* at our website: *Click HERE*

Overview 1
Hardware Setup 2
Card Connection 2
Card Configuration 2
LogBook Connection 2
DaqBook and DaqBoard Connection 2
DBK21 DB37 Male P2 Connector Pinout 3
Software Setup 3
DBK20 - Specifications 5
DBK21 - Specifications 5

DBK20 – Provides Screw Terminals.
DBK21 – Provides DB37 male connectors.



Reference Notes:

- Chapter 2 includes pinouts for P1, P2, P3, and P4. Refer to pinouts applicable to your system, as needed.
- In regard to calculating system power requirements, refer to *DBK Basics* located near the front of this manual.

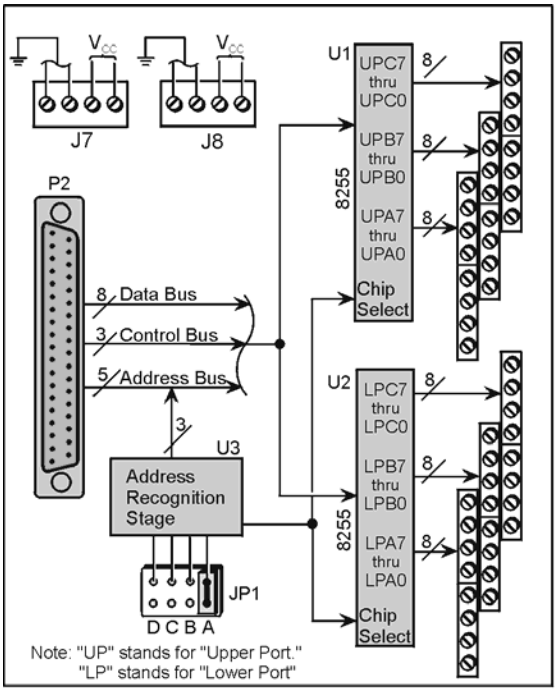
Overview

The DBK20 and DBK21 are general purpose digital I/O cards that can increase available digital I/O lines by 48 per card. The DBK20 uses screw terminals; the DBK21 uses DB37 connectors. Both cards connect to the P2 digital I/O port via the interface cable (CA-37-x).

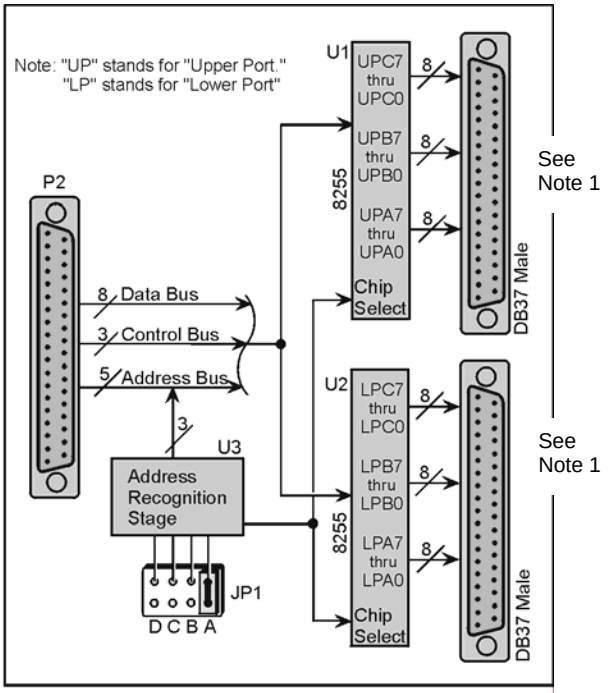
Note: DBK20 and DBK21 require a P2 interface and therefore, can not be used with Daq PC-Cards.

Note: For DaqBoard/2000 Series and /2000c Series board applications, the P2 interface is derived via use of an appropriate P4 adapter. P4 adapters are discussed in the DBK200 Series document modules.

Up to four DBK20s or DBK21s can be attached for a maximum of 192 lines (4×48). The local I/O lines cannot be used while expansion cards are attached. Thus, the first expansion card increases the number of usable digital I/O lines from 24 to 48, and subsequent cards each add 48 additional lines of programmable digital I/O.



DBK20 Block Diagram



DBK21 Block Diagram

Note 1: Page 3 of this document module includes a pinout of the DBK21's male DB37 connectors.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Hardware Setup

Card Connection

1. Connect wire leads to terminal blocks (if using a DBK20) or ribbon cable(s) terminated in 37-pin female connectors (if using a DBK21).
2. Once all connections are in place, secure wires to the board at captive areas at the end of the card. Nylon tie wraps (not included) work well for this purpose.

Card Configuration

The header shunt must be set on the proper JP1 position for the intended address. The table shows the 4 choices available.

Note: In multiple card systems, only 1 card at a time can have any given setting.

Set JP1 header for the desired base address by placing the shunt jumper in one of the positions noted in the table (A to D). JP1 is labeled ADDRESS SELECT and is located at the card's lower left side.

Address Select	Hex Value	Bank
A	0x63 0x67	0
B	0x6B 0x6F	1
C	0x73 0x77	2
D	0x7B 0x7F	3

LogBook Connection

The DBK20 or DBK21s attach to the LogBook's P2 digital I/O connector.



P2 expansion cables must be kept short for proper operation.
Do not exceed 14" per attached DBK card.

A series of interface cables are available for connecting up to four DBK20 or DBK21 cards.

1. If using the optional DBK10 enclosure, slide the DB37 end of the board into a rear opening, and secure with hold-in screw-washer at rear panel.
2. Connect an accessory ribbon cable (with -x indicating the number of cards to be connected) from the digital I/O port (P2) of the LogBook to the DB37 connector at the end of the option card.

DaqBook and DaqBoard Connection

The DBK20 or DBK21s attach to the DaqBook, DaqBoard [ISA type] P2 digital I/O connector or, for a DaqBoard/2000 Series or /2000/c Series board, to the P2 connector of an appropriate P4 adapter. P4 adapters are discussed in DBK200 Series document modules.



P2 expansion cables must be kept short for proper operation.
Do not exceed 14" per attached DBK card.

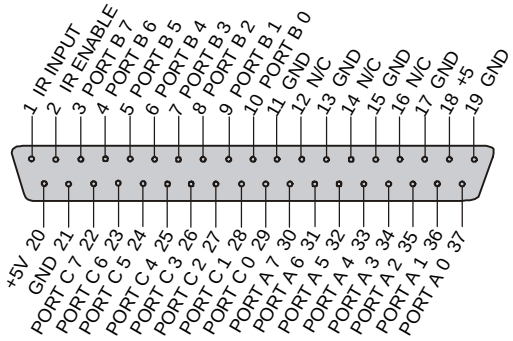
A series of interface cables are available for connecting up to four DBK20 or DBK21 cards.

1. If using the optional DBK10 enclosure, slide the DB37 end of the board into a rear opening, and secure with hold-in screw-washer at rear panel.
2. Connect an accessory ribbon cable (with -x indicating the number of cards to be connected) from the digital I/O port (P2) of the Daq devices or adapter to the DB37 connector at the end of the option card.

DaqBook and DaqBoard Configuration

There are no hardware configuration setups internal to DaqBooks and DaqBoards to allow expanded TTL I/O usage.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



Note: There are two male DB37 connectors per DBK21 card.

Pin	Signal Name	Description for P2 Pin Use
1	IR INPUT	Interrupt line input (no functions to access this)
2	IR ENABLE	Interrupt line enable (no functions to access this)
3	PORT B 7	Digital input/output - port B bit 7
4	PORT B 6	Digital input/output - port B bit 6
5	PORT B 5	Digital input/output - port B bit 5
6	PORT B 4	Digital input/output - port B bit 4
7	PORT B 3	Digital input/output - port B bit 3
8	PORT B 2	Digital input/output - port B bit 2
9	PORT B 1	Digital input/output - port B bit 1
10	PORT B 0	Digital input/output - port B bit 0
11	GND	Digital ground
12	N/C	Pin not connected/not used
13	GND	Digital ground
14	N/C	Pin not connected/not used
15	GND	Digital ground
16	N/C	Pin not connected/not used
17	GND	Digital ground
18	+5 V	+5 V supply (Refer to *Power Requirements, DBK Basics pg. 13*)
19	GND	Digital ground
20	+5 V	+5 V supply (Refer to *Power Requirements, DBK Basics pg 13*)
21	GND	Digital ground
22	PORT C 7	Digital input/output - port C bit 7
23	PORT C 6	Digital input/output - port C bit 6
24	PORT C 5	Digital input/output - port C bit 5
25	PORT C 4	Digital input/output - port C bit 4
26	PORT C 3	Digital input/output - port C bit 3
27	PORT C 2	Digital input/output - port C bit 2
28	PORT C 1	Digital input/output - port C bit 1
29	PORT C 0	Digital input/output - port C bit 0
30	PORT A 7	Digital input/output - port A bit 7
31	PORT A 6	Digital input/output - port A bit 6
32	PORT A 5	Digital input/output - port A bit 5
33	PORT A 4	Digital input/output - port A bit 4
34	PORT A 3	Digital input/output - port A bit 3
35	PORT A 2	Digital input/output - port A bit 2
36	PORT A 1	Digital input/output - port A bit 1
37	PORT A 0	Digital input/output - port A bit 0

Software Setup

Reference Notes:

- **DaqView users** - Refer to chapter 3, *DBK Setup in DaqView*.
- **LogView users** - Refer to chapter 4, *DBK Setup in LogView*.

Note: Refer to the full-page table on the next page for valid hex codes.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Binary	LR8	LR7	LR6	LR5	LR4	LR3	LR2	LR1	HEX
00000000	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	00
00000001	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	01
00000010	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	02
00000011	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	03
00000100	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	04
00000101	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	05
00000110	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	06
00000111	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	07
00001000	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	08
00001001	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	09
00001010	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	0A
00001011	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	0B
00001100	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	0C
00001101	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	0D
00001110	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	0E
00001111	OFF	OFF	OFF	OFF	ON	ON	ON	ON	0F
00010000	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	10
00010001	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	11
00010010	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	12
00010011	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	13
00010100	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	14
00010101	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	15
00010110	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	16
00010111	OFF	OFF	OFF	ON	OFF	ON	ON	ON	17
00011000	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	18
00011001	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	19
00011010	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	1A
00011011	OFF	OFF	OFF	ON	ON	OFF	ON	ON	1B
00011100	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	1C
00011101	OFF	OFF	OFF	ON	ON	ON	OFF	ON	1D
00011110	OFF	OFF	OFF	ON	ON	ON	ON	OFF	1E
00011111	OFF	OFF	OFF	ON	ON	ON	ON	ON	1F
00100000	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	20
00100001	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	21
00100010	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	22
00100011	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	23
00100100	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	24
00100101	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	25
00100110	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	26
00100111	OFF	OFF	ON	OFF	OFF	ON	ON	ON	27
00101000	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	28
00101001	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	29
00101010	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	2A
00101011	OFF	OFF	ON	OFF	ON	OFF	ON	ON	2B
00101100	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	2C
00101101	OFF	OFF	ON	OFF	ON	ON	OFF	ON	2D
00101110	OFF	OFF	ON	OFF	ON	ON	ON	OFF	2E
00101111	OFF	OFF	ON	OFF	ON	ON	ON	ON	2F
00110000	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	30
00110001	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	31
00110010	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	32
00110011	OFF	OFF	ON	ON	OFF	OFF	ON	ON	33
00110100	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	34
00110101	OFF	OFF	ON	ON	OFF	ON	OFF	ON	35
00110110	OFF	OFF	ON	ON	OFF	ON	ON	OFF	36
00110111	OFF	OFF	ON	ON	OFF	ON	ON	ON	37
00111000	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	38
00111001	OFF	OFF	ON	ON	ON	OFF	OFF	ON	39
00111010	OFF	OFF	ON	ON	ON	OFF	ON	OFF	3A
00111011	OFF	OFF	ON	ON	ON	OFF	ON	ON	3B
00111100	OFF	OFF	ON	ON	ON	ON	OFF	OFF	3C
00111101	OFF	OFF	ON	ON	ON	ON	OFF	ON	3D
00111110	OFF	OFF	ON	ON	ON	ON	ON	OFF	3E
00111111	OFF	OFF	ON	ON	ON	ON	ON	ON	3F
01000000	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	40
01000001	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	41
01000010	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	42
01000011	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	43
01000100	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	44
01000101	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	45
01000110	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	46
01000111	OFF	ON	OFF	OFF	OFF	ON	ON	ON	47
01001000	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	48
01001001	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	49
01001010	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	4A
01001011	OFF	ON	OFF	OFF	ON	OFF	ON	ON	4B
01001100	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	4C
01001101	OFF	ON	OFF	OFF	ON	ON	OFF	ON	4D
01001110	OFF	ON	OFF	OFF	ON	ON	ON	OFF	4E
01001111	OFF	ON	OFF	OFF	ON	ON	ON	ON	4F
01010000	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	50
01010001	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	51
01010010	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	52
01010011	OFF	ON	OFF	ON	OFF	OFF	ON	ON	53
01010100	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	54
01010101	OFF	ON	OFF	ON	OFF	ON	OFF	ON	55
01010110	OFF	ON	OFF	ON	OFF	ON	ON	OFF	56
01010111	OFF	ON	OFF	ON	OFF	ON	ON	ON	57
01011000	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	58
01011001	OFF	ON	OFF	ON	ON	OFF	OFF	ON	59
01011010	OFF	ON	OFF	ON	ON	OFF	ON	OFF	5A
01011011	OFF	ON	OFF	ON	ON	OFF	ON	ON	5B
01011100	OFF	ON	OFF	ON	ON	ON	OFF	OFF	5C
01011101	OFF	ON	OFF	ON	ON	ON	OFF	ON	5D
01011110	OFF	ON	OFF	ON	ON	ON	ON	OFF	5E
01011111	OFF	ON	OFF	ON	ON	ON	ON	ON	5F
01100000	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	60
01100001	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	61
01100010	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	62
01100011	OFF	ON	ON	OFF	OFF	OFF	ON	ON	63
01100100	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	64
01100101	OFF	ON	ON	OFF	OFF	ON	OFF	ON	65
01100110	OFF	ON	ON	OFF	OFF	ON	ON	OFF	66
01100111	OFF	ON	ON	OFF	OFF	ON	ON	ON	67
01101000	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	68
01101001	OFF	ON	ON	OFF	ON	OFF	OFF	ON	69
01101010	OFF	ON	ON	OFF	ON	OFF	ON	OFF	6A
01101011	OFF	ON	ON	OFF	ON	OFF	ON	ON	6B
01101100	OFF	ON	ON	OFF	ON	ON	OFF	OFF	6C
01101101	OFF	ON	ON	OFF	ON	ON	OFF	ON	6D
01101110	OFF	ON	ON	OFF	ON	ON	ON	OFF	6E
01101111	OFF	ON	ON	OFF	ON	ON	ON	ON	6F
01110000	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	70
01110001	OFF	ON	ON	ON	OFF	OFF	OFF	ON	71
01110010	OFF	ON	ON	ON	OFF	OFF	ON	OFF	72
01110011	OFF	ON	ON	ON	OFF	OFF	ON	ON	73
01110100	OFF	ON	ON	ON	OFF	ON	OFF	OFF	74
01110101	OFF	ON	ON	ON	OFF	ON	OFF	ON	75
01110110	OFF	ON	ON	ON	OFF	ON	ON	OFF	76
01110111	OFF	ON	ON	ON	OFF	ON	ON	ON	77
01111000	OFF	ON	ON	ON	ON	OFF	OFF	OFF	78
01111001	OFF	ON	ON	ON	ON	OFF	OFF	ON	79
01111010	OFF	ON	ON	ON	ON	OFF	ON	OFF	7A
01111011	OFF	ON	ON	ON	ON	OFF	ON	ON	7B
01111100	OFF	ON	ON	ON	ON	ON	OFF	OFF	7C
01111101	OFF	ON	ON	ON	ON	ON	OFF	ON	7D
01111110	OFF	ON	ON	ON	ON	ON	ON	OFF	7E
01111111	OFF	ON	ON	ON	ON	ON	ON	ON	7F
10000000	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	80
10000001	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	81
10000010	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	82
10000011	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	83
10000100	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	84
10000101	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	85
10000110	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	86
10000111	ON	OFF	OFF	OFF	OFF	ON	ON	ON	87
10001000	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	88
10001001	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	89
10001010	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	8A
10001011	ON	OFF	OFF	OFF	ON	OFF	ON	ON	8B
10001100	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	8C
10001101	ON	OFF	OFF	OFF	ON	ON	OFF	ON	8D
10001110	ON	OFF	OFF	OFF	ON	ON	ON	OFF	8E
10001111	ON	OFF	OFF	OFF	ON	ON	ON	ON	8F
10010000	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	90
10010001	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	91
10010010	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	92
10010011	ON	OFF	OFF	ON	OFF	OFF	ON	ON	93
10010100	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	94
10010101	ON	OFF	OFF	ON	OFF	ON	OFF	ON	95
10010110	ON	OFF	OFF	ON	OFF	ON	ON	OFF	96
10010111	ON	OFF	OFF	ON	OFF	ON	ON	ON	97
10011000	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	98
10011001	ON	OFF	OFF	ON	ON	OFF	OFF	ON	99
10011010	ON	OFF	OFF	ON	ON	OFF	ON	OFF	9A
10011011	ON	OFF	OFF	ON	ON	OFF	ON	ON	9B
10011100	ON	OFF	OFF	ON	ON	ON	OFF	OFF	9C
10011101	ON	OFF	OFF	ON	ON	ON	OFF	ON	9D
10011110	ON	OFF	OFF	ON	ON	ON	ON	OFF	9E
10011111	ON	OFF	OFF	ON	ON	ON	ON	ON	9F
10100000	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	A0
10100001	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	A1
10100010	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	A2
10100011	ON	OFF	ON	OFF	OFF	OFF	ON	ON	A3
10100100	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	A4
10100101	ON	OFF	ON	OFF	OFF	ON	OFF	ON	A5
10100110	ON	OFF	ON	OFF	OFF	ON	ON	OFF	A6
10100111	ON	OFF	ON	OFF	OFF	ON	ON	ON	A7
10101000	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	A8
10101001	ON	OFF	ON	OFF	ON	OFF	OFF	ON	A9
10101010	ON	OFF	ON	OFF	ON	OFF	ON	OFF	AA
10101011	ON	OFF	ON	OFF	ON	OFF	ON	ON	AB
10101100	ON	OFF	ON	OFF	ON	ON	OFF	OFF	AC
10101101	ON	OFF	ON	OFF	ON	ON	OFF	ON	AD
10101110	ON	OFF	ON	OFF	ON	ON	ON	OFF	AE
10101111	ON	OFF	ON	OFF	ON	ON	ON	ON	AF
10110000	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	B0
10110001	ON	OFF	ON	ON	OFF	OFF	OFF	ON	B1
10110010	ON	OFF	ON	ON	OFF	OFF	ON	OFF	B2
10110011	ON	OFF	ON	ON	OFF	OFF	ON	ON	B3
10110100	ON	OFF	ON	ON	OFF	ON	OFF	OFF	B4
10110101	ON	OFF	ON	ON	OFF	ON	OFF	ON	B5
10110110	ON	OFF	ON	ON	OFF	ON	ON	OFF	B6
10110111	ON	OFF	ON	ON	OFF	ON	ON	ON	B7
10111000	ON	OFF	ON	ON	ON	OFF	OFF	OFF	B8
10111001	ON	OFF	ON	ON	ON	OFF	OFF	ON	B9
10111010	ON	OFF	ON	ON	ON	OFF	ON	OFF	BA
10111011	ON	OFF	ON	ON	ON	OFF	ON	ON	BB
10111100	ON	OFF	ON	ON	ON	ON	OFF	OFF	BC
10111101	ON	OFF	ON	ON	ON	ON	OFF	ON	BD
10111110	ON	OFF	ON	ON	ON	ON	ON	OFF	BE
10111111	ON	OFF	ON	ON	ON	ON	ON	ON	BF
11000000	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	C0
11000001	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	C1
11000010	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	C2
11000011	ON	ON	OFF	OFF	OFF	OFF	ON	ON	C3
11000100	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	C4
11000101	ON	ON	OFF	OFF	OFF	ON	OFF	ON	C5
11000110	ON	ON	OFF	OFF	OFF	ON	ON	OFF	C6
11000111	ON	ON	OFF	OFF	OFF	ON	ON	ON	C7
11001000	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	C8
11001001	ON	ON	OFF	OFF	ON	OFF	OFF	ON	C9
11001010	ON	ON	OFF	OFF	ON	OFF	ON	OFF	CA
11001011	ON	ON	OFF	OFF	ON	OFF	ON	ON	CB
11001100	ON	ON	OFF	OFF	ON	ON	OFF	OFF	CC
11001101	ON	ON	OFF	OFF	ON	ON	OFF	ON	CD
11001110	ON	ON	OFF	OFF	ON	ON	ON	OFF	CE
11001111	ON	ON	OFF	OFF	ON	ON	ON	ON	CF
11010000	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	D0
11010001	ON	ON	OFF	ON	OFF	OFF	OFF	ON	D1
11010010	ON	ON	OFF	ON	OFF	OFF	ON	OFF	D2
11010011	ON	ON	OFF	ON	OFF	OFF	ON	ON	D3
11010100	ON	ON	OFF	ON	OFF	ON	OFF	OFF	D4
11010101	ON	ON	OFF	ON	OFF	ON	OFF	ON	D5
11010110	ON	ON	OFF	ON	OFF	ON	ON	OFF	D6
11010111	ON	ON	OFF	ON	OFF	ON	ON	ON	D7
11011000	ON	ON	OFF	ON	ON	OFF	OFF	OFF	D8
11011001	ON	ON	OFF	ON	ON	OFF	OFF	ON	D9
11011010	ON	ON	OFF	ON	ON	OFF	ON	OFF	DA
11011011	ON	ON	OFF	ON	ON	OFF	ON	ON	DB
11011100	ON	ON	OFF	ON	ON	ON	OFF	OFF	DC
11011101	ON	ON	OFF	ON	ON	ON	OFF	ON	DD
11011110	ON	ON	OFF	ON	ON	ON	ON	OFF	DE
11011111	ON	ON	OFF	ON	ON	ON	ON	ON	DF
11100000	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	E0
11100001	ON	ON	ON	OFF	OFF	OFF	OFF	ON	E1
11100010	ON	ON	ON	OFF	OFF	OFF	ON	OFF	E2
11100011	ON	ON	ON	OFF	OFF	OFF	ON	ON	E3
11100100	ON	ON	ON	OFF	OFF	ON	OFF	OFF	E4
11100101	ON	ON	ON	OFF	OFF	ON	OFF	ON	E5
11100110	ON	ON	ON	OFF	OFF	ON	ON	OFF	E6
11100111	ON	ON	ON	OFF	OFF	ON	ON	ON	E7
11101000	ON	ON	ON	OFF	ON	OFF	OFF	OFF	E8
11101001	ON	ON	ON	OFF	ON	OFF	OFF	ON	E9
11101010	ON	ON	ON	OFF	ON	OFF	ON	OFF	EA
11101011	ON	ON	ON	OFF	ON	OFF	ON	ON	EB
11101100	ON	ON	ON	OFF	ON	ON	OFF	OFF	EC
11101101	ON	ON	ON	OFF	ON	ON	OFF	ON	ED
11101110	ON	ON	ON	OFF	ON	ON	ON	OFF	EE
11101111	ON	ON	ON	OFF	ON	ON	ON	ON	EF
11110000	ON	ON	ON	ON	OFF	OFF	OFF	OFF	F0
11110001	ON	ON	ON	ON	OFF	OFF	OFF	ON	F1
11110010	ON	ON	ON	ON	OFF	OFF	ON	OFF	F2
11110011	ON	ON	ON	ON	OFF	OFF	ON	ON	F3
11110100	ON	ON	ON	ON	OFF	ON	OFF	OFF	F4
11110101	ON	ON	ON	ON	OFF	ON	OFF	ON	F5
11110110	ON	ON	ON	ON	OFF	ON	ON	OFF	F6
11110111	ON	ON	ON	ON	OFF	ON	ON	ON	F7
11111000	ON	ON	ON	ON	ON	OFF	OFF	OFF	F8
11111001	ON	ON	ON	ON	ON	OFF	OFF	ON	F9
11111010	ON	ON	ON	ON	ON	OFF	ON	OFF	FA
11111011	ON	ON	ON	ON	ON	OFF	ON	ON	FB
11111100	ON	ON	ON	ON	ON	ON	OFF	OFF	FC
11111101	ON	ON	ON	ON	ON	ON	OFF	ON	FD
11111110	ON	ON	ON	ON	ON	ON	ON	OFF	FE
11111111	ON	ON	ON	ON	ON	ON	ON	ON	FF

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

DBK20 - Specifications

Name/Function: General Purpose Digital I/O Card

Number of Channels: 48 I/O channels

Connector: Screw terminals

Device: 82C55 x 2

Output Voltage Levels:
Minimum “1" Voltage: 3.0 @ 2.5 mA sourcing
Maximum “0" Voltage: 0.4 @ 2.5 mA sinking

Output Currents:
Maximum Source Current: 2.5 mA
Maximum Sink Current: -2.5 mA

Input Voltage Levels:
Minimum Required “1” Voltage Level: 2.0 V
Maximum Allowed “0” Voltage Level: 0.8 V

Output Float Leakage Current: 10 µA

DBK21 – Specifications

Name/Function: General Purpose Digital I/O Card

Number of Channels: 48 I/O channels

Connector: DB37 male, corresponds to P2 pinout

Device: 82C55 x 2

Output Voltage Levels:
Minimum “1” Voltage: 3.0 @ 2.5 mA sourcing
Maximum “0” Voltage: 0.4 @ 2.5 mA sinking

Output Currents:
Maximum Source Current: 2.5 mA
Maximum Sink Current: -2.5 mA

Input Voltage Levels:
Minimum Required “1” Voltage Level: 2.0 V
Maximum Allowed “0” Voltage Level: 0.8 V

Output Float Leakage Current: 10 µA

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP