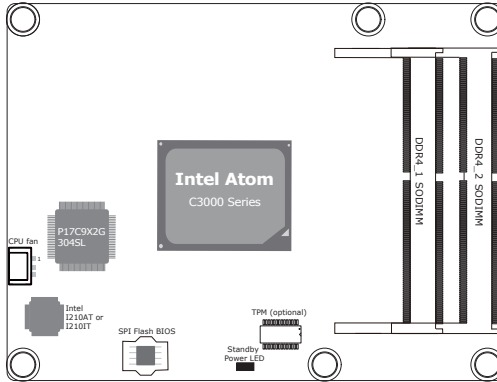


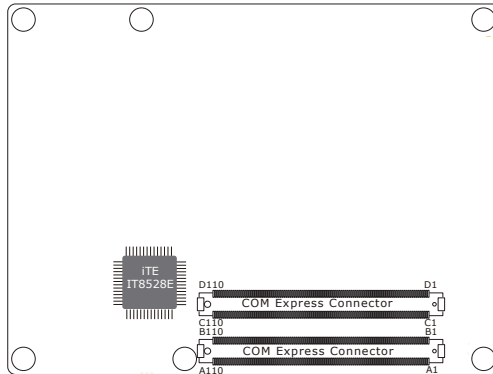
DFI

DV970 Quick Reference

Board Layout



TOP



BOTTOM



Pin Assignments

CPU Fan Connector

Pin	Assignment
1	Sense
2	+12V
3	GND

COM Express Connectors

Row A	Row B	Row A	Row B
A1	GND (FIXED)	A56	PCIE_TX4-
A2	GBE0_MDI3-	A57	GND
A3	GBE0_MDI3+	A58	PCIE_TX3+
A4	GBE0_LINK100#	A59	PCIE_TX3-
A5	GBE0_LINK1000#	A60	GND (FIXED)
A6	GBE0_MDI2-	A61	PCIE_TX2+
A7	GBE0_MDI2+	A62	PCIE_TX2-
A8	GBE0_LINK#	A63	GPI1
A9	GBE0_MDI1-	A64	PCIE_TX1+
A10	GBE0_MDI1+	A65	PCIE_TX1-
A11	GND (FIXED)	A66	GND
A12	GBE0_MDI0-	A67	GPI2
A13	GBE0_MDI0+	A68	PCIE_TX0+
A14	GBE0_CTRF	A69	PCIE_TX0-
A15	SUS_S3#	A70	GND (FIXED)
A16	SATA0_TX+	A71	PCIE_TX8+
A17	SATA0_TX-	A72	PCIE_TX8-
A18	SUS_S4#	A73	GND
A19	SATA0_RX+	A74	PCIE_TX9+
A20	SATA0_RX-	A75	PCIE_TX9-
A21	GND (FIXED)	A76	GND
A22	N.C.	A77	N.C.
A23	N.C.	A78	N.C.
A24	SUS_S5#	A79	GND
A25	N.C.	A80	GND (FIXED)
A26	N.C.	A81	N.C.
A27	BATLOW#	A82	N.C.
A28	(S)ATA_ACT#	A83	GND
A29	RSVD	A84	NCSI_TX_EN
A30	RSVD	A85	GPI3
A31	GND (FIXED)	A86	RSVD
A32	RSVD	A87	RSVD
A33	RSVD	A88	PCIE_CK_REF+
A34	BIOS_DIS0#	A89	PCIE_CK_REF-
A35	THRMTrip#	A90	GND (FIXED)
A36	N.C.	A91	SPI_POWER
A37	N.C.	A92	SPI_MISO
A38	GND	A93	GPO0
A39	PCIE_TX12+	A94	SPI_CLK
A40	PCIE_TX12-	A95	SPI_MOSI
A41	GND (FIXED)	A96	TPM_PP
A42	USB2-	A97	N.C.
A43	USB2+	A98	SER0_TX
A44	USB_2_3_OC#	A99	SER0_RX
A45	USB0-	A100	GND (FIXED)
A46	USB0+	A101	SER1_TX
A47	VCC_RTC	A102	SER1_RX
A48	RSVD	A103	LID#
A49	GBE0_SDP	A104	VCC_12V
A50	LPC_SERIRQ	A105	VCC_12V
A51	GND (FIXED)	A106	VCC_12V
A52	PCIE_TX5+	A107	VCC_12V
A53	PCIE_TX5-	A108	VCC_12V
A54	GPI0	A109	VCC_12V
A55	PCIE_TX4+	A110	GND (FIXED)
B1	GND (FIXED)	B56	PCIE_RX4-
B2	GBE0_ACT#	B57	GPO2
B3	LPC_FRAME#	B58	PCIE_RX3+
B4	LPC_AD0	B59	PCIE_RX3-
B5	LPC_AD1	B60	GND (FIXED)
B6	LPC_AD2	B61	PCIE_RX2+
B7	LPC_AD3	B62	PCIE_RX2-
B8	LPC_DRQ0#	B63	GPO3
B9	LPC_DRQ1#	B64	PCIE_RX1+
B10	LPC_CLK	B65	PCIE_RX1-
B11	GND (FIXED)	B66	WAKE0#
B12	PWRBTN#	B67	WAKE1#
B13	SMB_CK	B68	PCIE_RX0+
B14	SMB_DAT	B69	PCIE_RX0-
B15	SMB_ALERT#	B70	GND (FIXED)
B16	SATA1_TX+	B71	PCIE_RX8+
B17	SATA1_TX-	B72	PCIE_RX8-
B18	SUS_STAT#	B73	GND
B19	SATA1_RX+	B74	PCIE_RX9+
B20	SATA1_RX-	B75	PCIE_RX9-
B21	GND (FIXED)	B76	GND
B22	N.C.	B77	N.C.
B23	N.C.	B78	N.C.
B24	PWR_OK	B79	GND
B25	N.C.	B80	GND (FIXED)
B26	N.C.	B81	N.C.
B27	WDT	B82	N.C.
B28	RSVD	B83	GND
B29	RSVD	B84	VCC_5V_SBY
B30	RSVD	B85	VCC_5V_SBY
B31	GND (FIXED)	B86	VCC_5V_SBY
B32	SPKR	B87	VCC_5V_SBY
B33	I2C_CK	B88	BIOS_DIS1#
B34	I2C_DAT	B89	NCSI_RX_ER
B35	THRM#	B90	GND (FIXED)
B36	N.C.	B91	NCSI_CLK_IN
B37	N.C.	B92	NCSI_RXD1
B38	GND	B93	NCSI_RXD0
B39	PCIE_RX12+	B94	NCSI_CRD_DV
B40	PCIE_RX12-	B95	NCSI_TXD1
B41	GND (FIXED)	B96	NCSI_TXD0
B42	USB3-	B97	SPI_CS#
B43	USB3+	B98	NCSI_ARB_IN
B44	USB_0_1_OC#	B99	NCSI_ARB_OUT
B45	USB1-	B100	GND (FIXED)
B46	USB1+	B101	FAN_PWMOUT
B47	ESPI_EN#	B102	FAN_TACHIN
B48	N.C.	B103	SLEEP#
B49	SYS_RESET#	B104	VCC_12V
B50	CB_RESET#	B105	VCC_12V
B51	GND (FIXED)	B106	VCC_12V
B52	PCIE_RX5+	B107	VCC_12V
B53	PCIE_RX5-	B108	VCC_12V
B54	GPO1	B109	VCC_12V
B55	PCIE_RX4+	B110	GND (FIXED)

DV970 only supports LPC interface, no eSPI mode interface.

Row C	Row D	Row C	Row D
C1	GND (FIXED)	D1	GND (FIXED)
C2	GND	D2	GND
C3	USB_SSRX0-	D3	USB_SSTX0-
C4	USB_SSRX0+	D4	USB_SSTX0+
C5	GND	D5	GND
C6	USB_SSRX1-	D6	USB_SSTX1-
C7	USB_SSRX1+	D7	USB_SSTX1+
C8	GND	D8	GND
C9	N.C.	D9	N.C.
C10	N.C.	D10	N.C.
C11	GND (FIXED)	D11	GND (FIXED)
C12	N.C.	D12	N.C.
C13	N.C.	D13	N.C.
C14	GND	D14	GND
C15	10G_PHY_MDC_SCL3	D15	10G_PHY_MDIO_SDA3
C16	10G_PHY_MDC_SCL2	D16	10G_PHY_MDIO_SDA2
C17	10G_SDP2	D17	10G_SDP3
C18	GND	D18	GND
C19	PCIE_RX6+	D19	PCIE_TX6+
C20	PCIE_RX6-	D20	PCIE_TX6-
C21	GND (FIXED)	D21	GND (FIXED)
C22	PCIE_RX7+	D22	PCIE_TX7+
C23	PCIE_RX7-	D23	PCIE_TX7-
C24	10G_INT2	D24	10G_INT3
C25	GND	D25	GND
C26	10G_KR_RX3+	D26	10G_KR_TX3+
C27	10G_KR_RX3-	D27	10G_KR_TX3-
C28	GND	D28	GND
C29	10G_KR_RX2+	D29	10G_KR_TX2+
C30	10G_KR_RX2-	D30	10G_KR_TX2-
C31	GND (FIXED)	D31	GND (FIXED)
C32	10G_SFP_SDA3	D32	10G_SFP_SCL3
C33	10G_SFP_SDA2	D33	10G_SFP_SCL2
C34	10G_PHY_RST_23	D34	10G_PHY_CAP_23
C35	10G_PHY_RST_01	D35	10G_PHY_CAP_01
C36	10G_LED_SDA	D36	RSVD
C37	10G_LED_SCL	D37	RSVD
C38	10G_SFP_SDA1	D38	10G_SFP_SCL1
C39	10G_SFP_SDA0	D39	10G_SFP_SCL0
C40	10G_SDP0	D40	10G_SDP1
C41	GND (FIXED)	D41	GND (FIXED)
C42	10G_KR_RX1+	D42	10G_KR_TX1+
C43	10G_KR_RX1-	D43	10G_KR_TX1-
C44	GND	D44	GND
C45	10G_PHY_MDC_SCL1	D45	10G_PHY_MDIO_SDA1
C46	10G_PHY_MDC_SCL0	D46	10G_PHY_MDIO_SDA0
C47	10G_INT0	D47	10G_INT1
C48	GND	D48	GND
C49	10G_KR_RX0+	D49	10G_KR_TX0+
C50	10G_KR_RX0-	D50	10G_KR_TX0-
C51	GND (FIXED)	D51	GND (FIXED)
C52	PCIE_RX16+	D52	PCIE_TX16+
C53	PCIE_RX16-	D53	PCIE_TX16-
C54	TYPE0#	D54	RSVD
C55	PCIE_RX17+	D55	PCIE_TX17+
C56	PCIE_RX17-	D56	PCIE_TX17-
C57	N.C.	D57	TYPE2#
C58	PCIE_RX18+	D58	PCIE_TX18+
C59	PCIE_RX18-	D59	PCIE_TX18-
C60	GND (FIXED)	D60	GND (FIXED)
C61	PCIE_RX19+	D61	PCIE_TX19+
C62	PCIE_RX19-	D62	PCIE_TX19-
C63	RSVD	D63	RSVD
C64	RSVD	D64	RSVD
C65	PCIE_RX20+	D65	PCIE_TX20+
C66	PCIE_RX20-	D66	PCIE_TX20-
C67	RAPID_SHUTDOWN	D67	GND
C68	PCIE_RX21+	D68	PCIE_TX21+
C69	PCIE_RX21-	D69	PCIE_TX21-
C70	GND (FIXED)	D70	GND (FIXED)
C71	PCIE_RX22+	D71	PCIE_TX22+
C72	PCIE_RX22-	D72	PCIE_TX22-
C73	GND	D73	GND
C74	PCIE_RX23+	D74	PCIE_TX23+
C75	PCIE_RX23-	D75	PCIE_TX23-
C76	GND	D76	GND
C77	RSVD	D77	RSVD
C78	PCIE_RX24+	D78	PCIE_TX24+
C79	PCIE_RX24-	D79	PCIE_TX24-
C80	GND (FIXED)	D80	GND (FIXED)
C81	PCIE_RX25+	D81	PCIE_TX25+
C82	PCIE_RX25-	D82	PCIE_TX25-
C83	RSVD	D83	RSVD
C84	GND	D84	GND
C85	N.C.	D85	N.C.
C86	N.C.	D86	N.C.
C87	GND	D87	GND
C88	N.C.	D88	N.C.
C89	N.C.	D89	N.C.
C90	GND (FIXED)	D90	GND (FIXED)
C91	PCIE_RX28+	D91	PCIE_TX28+
C92	PCIE_RX28-	D92	PCIE_TX28-
C93	GND	D93	GND
C94	PCIE_RX29+	D94	PCIE_TX29+
C95	PCIE_RX29-	D95	PCIE_TX29-
C96	GND	D96	GND
C97	RSVD	D97	RSVD
C98	N.C.	D98	N.C.
C99	N.C.	D99	N.C.
C100	GND (FIXED)	D100	GND (FIXED)
C101	N.C.	D101	N.C.
C102	N.C.	D102	N.C.
C103	GND	D103	GND
C104	VCC_12V	D104	VCC_12V
C105	VCC_12V	D105	VCC_12V
C106	VCC_12V	D106	VCC_12V
C107	VCC_12V	D107	VCC_12V
C108	VCC_12V	D108	VCC_12V
C109	VCC_12V	D109	VCC_12V
C110	GND (FIXED)	D110	GND (FIXED)



DFI reserves the right to change the specifications at any time prior to the product's release. For the latest information about the product, please refer to the user's manual at go.dfi.com/DV970.

