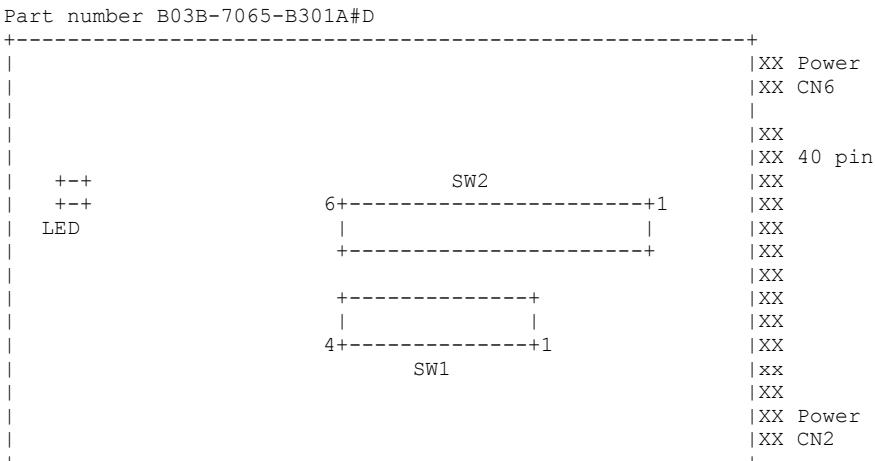
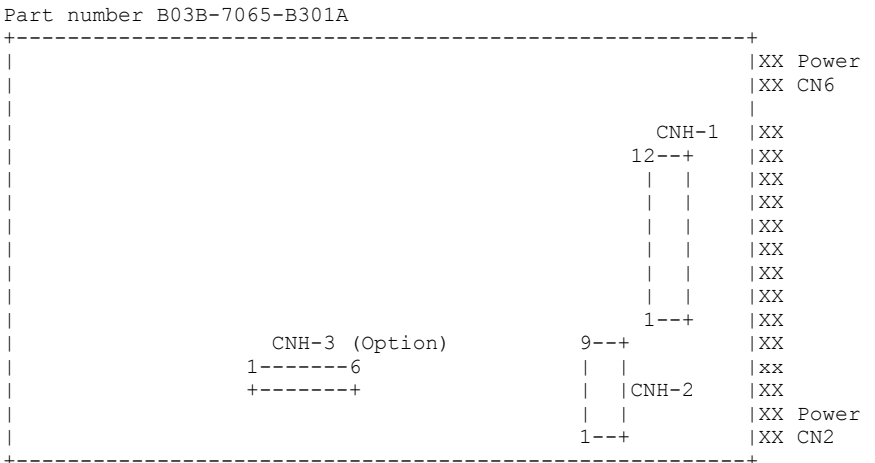


		Native	Translation
Form	3.5"/SLIMLINE	Cylinders 1334	667
Capacity form/uniform	45/ MB	Heads 2	4
Seek time / track	25.0/10.0 ms	Sector/track 33	33
Controller	IDE / AT	Precompensation	
Cache/Buffer	64 KB LOOK-AHEAD	Landing Zone	
Data transfer rate	1.250 MB/S int	Bytes/Sector	512
	7.400 MB/S ext		
Recording method	RLL 1/7	operating	non-operating
Supply voltage	5/12 V	Temperature *C	5 45 -40 60
Power: sleep	W	Humidity %	20 80 5 95
standby	2.5 W	Altitude km	-0.060 3.000 12.000
idle	W	Shock g	5 50
seek	5.5 W	Rotation RPM	3490
read/write	W	Acoustic dBA	40
spin-up	W	ECC Bit	32,56
		MTBF h	50000
		Warranty Month	
Lift/Lock/Park	YES	Certificates	

L A Y O U T

FUJITSU M2611T/M2611T#D OEM MANUAL 41FH5041E-02 / 41FH5059E-01



J U M P E R S

FUJITSU M2611T/M2611T#D OEM MANUAL 41FH5041E-02 / 41FH5059E-01

Switches locations
=====

x = Jumpers are set from factory

There are two versions: M2611T part number B03B-7065-B301A
M2611T#D B03B-7065-B301A#D

M2611T only

CNH-1 Slave present mode / Active mode

```

-----
x      1- 2  CLOSE  Active mode
      2- 3  OPEN

      1- 2  OPEN   Slave present mode
      2- 3  CLOSE

```

This operation is to set the slave present or active mode of M261xT.

CNH-1 I/O channel ready (IOCHRDY)

```

-----
      4- 5  CLOSE  Pin 27 = IOCHRDY
      5- 6  OPEN

      4- 5  OPEN   PIN 27 = Reserved
x      5- 6  CLOSE

```

When the data transfer rate of the host becomes very high (near 7.4MB/s or more), the M261xT must provide wait state to synchronize data transfer. This setting is used to output IOCHRDY to pin 27 of the host interface.

CNH-1 1-drive/2-drive system

```

-----
      7- 8  CLOSE  2-drive system
      8- 9  OPEN

      7- 8  OPEN   1-drive system
x      8- 9  CLOSE

```

CNH-1 IRQ14/RSVD switch

```

-----
      10-11 CLOSE  After exchange Pin 29 = IRQ14
      11-12 OPEN   Pin 31 = Reserved

      10-11 OPEN   Normal status Pin 29 = Reserved
x      11-12 CLOSE Pin 31 = IRQ14

```

This operation is to exchange settings of pin 29 and 31 to eliminate cross talk influence in the host interface cable.

CNH-2 MASTER/SLAVE drive system

```

-----
      1- 2  CLOSE  SLAVE drive
      4- 5  OPEN

      1- 2  OPEN   MASTER drive
x      4- 5  CLOSE

```

CNH-2 ECC bytes

```

-----
      7- 8  CLOSE  4 bytes
      8- 9  OPEN

      7- 8  OPEN   7 bytes
x      8- 9  CLOSE

```

In 4Byte ECC mode, the READ LONG/WRITE LONG command can be executed successfully only under the following sequence:

READ LONG -> WRITE LONG

CNH-3 Write protect (provided as an option)

```

-----
      1- 2  CLOSE  Write protected
      2- 3  OPEN

      1- 2  OPEN   Write enabled
x      2- 3  CLOSE

```

M2611T#D only

SW1 IRQ14/RSVD switch

```

-----
      1      OFF   After exchange Pin 29 = IRQ14
      2      ON    Pin 31 = Reserved

      1      ON    Normal status Pin 29 = Reserved
x      2      OFF  Pin 31 = IRQ14

```

This operation is to exchange settings of pin 29 and 31 to eliminate cross talk influence in the host interface cable.

SW1 Slave present mode / Active mode

```

x      3      OFF      Active mode
      4      ON
      3      ON      Slave present mode
      4      OFF

```

This plug should be set in Active mode on daisy-chained connection of both M261xT (M261xET).

The logical information of setting plugs is subject to change without prior notice.

SW2 MASTER/SLAVE drive system

```

-----
      1      OFF      SLAVE side of 2-drive system
      2      ON
x      1      ON      MASTER drive
      2      OFF

```

SW2 1-drive/2-drive system

```

-----
x      3      ON      2-drive system
      3      OFF     1-drive system

```

SW2 Write protect (provided as an option)

```

-----
x      4      ON      Write protected
      4      OFF     Write enabled

```

SW2 I/O channel ready (IOCHRDY)

```

-----
x      5      ON      Pin 27 = IOCHRDY
      5      OFF     Pin 27 = Reserved

```

When the data transfer rate of the host becomes very high (near 7.4MB/s or more), the M261xT must provide wait state to synchronize data transfer. This setting is used to output IOCHRDY to pin 27 of the host interface.

SW2 ECC bytes

```

-----
x      6      ON      4 bytes
      6      OFF     7 bytes

```

In 4Byte ECC mode, the READ LONG/WRITE LONG command can be executed successfully only under the following conditions:

- > READ LONG -> WRITE LONG sequence is only acceptable
- > The sector number of READ LONG and WRITE LONG must be the same
- > The number of sector on WRITE LONG must be the same one that host issued to the drive on READ LONG.



```

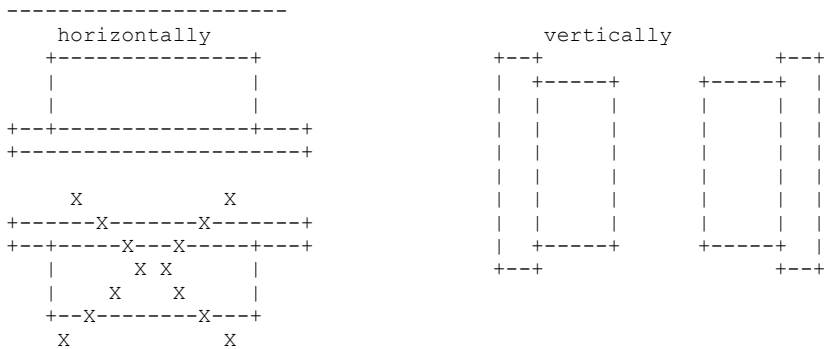
*****
                I N S T A L L
*****
FUJITSU M2611T/M2612T/M2613T/M2614T OEM MANUAL 41FH5041E-02

```

Notes on installation

=====

Installation direction



If the drive is installed in any of the above three installation directions, the level deviation must not exceed 5*.

Never install PCA to the top!

Ambient temperature

The ambient temperature is measured at a point 3cm from the drive when it is installed in a cabinet.

Set the air flow so that this temperature does not exceed 45°C.
The standard base surface temperature is 58°C or less. Air circulating in the cabinet should cool the PCA side especially.

Cable requirements

The cable of twisted pairs and neighboring line separated individually is not allowed to use for the host interface cable. It is because cross talk is generated when the data transfer rate becomes very high.

Cable length: 0.5m Max.

☐

F E A T U R E S

FUJITSU M2611T/M2612T/M2613T/M2614T OEM MANUAL 41FH5041E-02

Buffer

=====

The M261xT supports a look-ahead cache to increase system throughput. The M261xT uses 56KB of the cache to read and 6KB to write and a 2KB area to download sequencer programs.

Data transfer rate

=====

A maximum transfer rate of 7.4MB/s is accomplished with a 30MHz clock signal and high-speed buffer management. When the data transfer rate becomes near 7.4MB/s or more, the host must receive IOCHRDY signal and maintain the transfer synchronisation by setting a wait state.

Power save mode

=====

When the M261xT will not be operated for a long time, power consumption can be reduced by using the power save mode.

The M261xT supports two power modes which are selectable by the POWER command: idle mode and power save mode. In the power save mode, power is supplied only to the controller circuit, the spindle motor circuit and the drive control IC. Power to the other components is shut off by the power FET. Thus low power consumption is accomplished. In this mode, the spindle keeps rotation for hot restart.

Actuator lock mechanism

=====

When the M261xT is not in service, the actuator lock mechanism locks the head positioning arm to protect it.

Start and stop time

=====

Start time (time from when power is turned on until the IDD is ready) is 15 seconds or less, and stop time (time to completely stop when power is turned off) is 25 seconds or less.

Power on/off sequence

=====

The +5V and +12V power supplies are monitored by the voltage check circuit. The circuit allows a write current to flow only when the both voltages are normal. Accordingly, no power sequence is required. This is for protection of the content of the medium.

AC line noise

=====

To eliminate AC line noise, a noise filter of the specifications given below should be incorporated in the AC input terminal of the drive power supply.

Attenuation characteristics: 40 dB or greater at 10MHz

Circuit configuration: T type

Mean Time Between Failures (MTBF)

=====

The MTBF is defined as follows:

$$\text{MTBF} = \frac{\text{Operating time}}{\text{Number of equipment failures in the field}}$$

Operating time is the total time duration during which the power is on, excluding preventive maintenance.

Failure of the equipment means a failure that requires repair, adjustment, or replacement, excluding preventive maintenance. Errors by the operator, failures due to power failures, controller faults, cable faults, bad environmental conditions, or other failures not caused by the equipment itself are not included.

The IDD is designed for an MTBF of 50.000 hours.

Mean Time To Repair (MTTR)

=====

MTTR is the average time taken by a well-trained service engineer to diagnose and repair a unit malfunction. The IDD is designed for a MTTR of 30 minutes or less.

Service life

=====

Overhaul of the drive is not required for the first five years.

Data protection against power failure

=====

Integrity of the data on the disk is guaranteed against all forms of abnormal DC power except a power failure during writing.

Media Defect

=====

When a physical track contains two or more bad sectors, all sectors in the track are given BAD flags in formatting before the M261xT is shipped.

As regards media defect, it defines with number of bad tracks as follows. (provided that CYL0, HD0 is defect free)

Number of bad tracks per drive: max. 12 M2611T
 max. 24 M2612T
 max. 36 M2613T
 max. 48 M2614T

Drive BIOS specification

=====

The BIOS specification of the host must meet that of the M261xT in the number of cylinders, number of heads and sectors per track in order to make best use of the IDD. The BIOS specification of the IDD is specified by SET PARAMETERS. The IDD can be used if an appropriate BIOS specification from the existing drive type table in the host is selected within the capacity of the IDD. In this case the IDD can be operated within the limits of the capacity which is selected by the drive type.



 G E N E R A L

FUJITSU => GDT

Tips & Hints about ICP controllers and other peripherals

=====

Tagged queues and Fujitsu M 26xx harddisks

Fujitsu Harddisks of the M26XX series do not support the SCSI-II feature tagged queues. You should disable this feature in the initialize disks menu of the GDTSetup program. An inquiry command shows, that the harddisk supports tagged queues (this is why you can enable it in the GDTSetup) but this is not true as stated by Fujitsu Germany.

