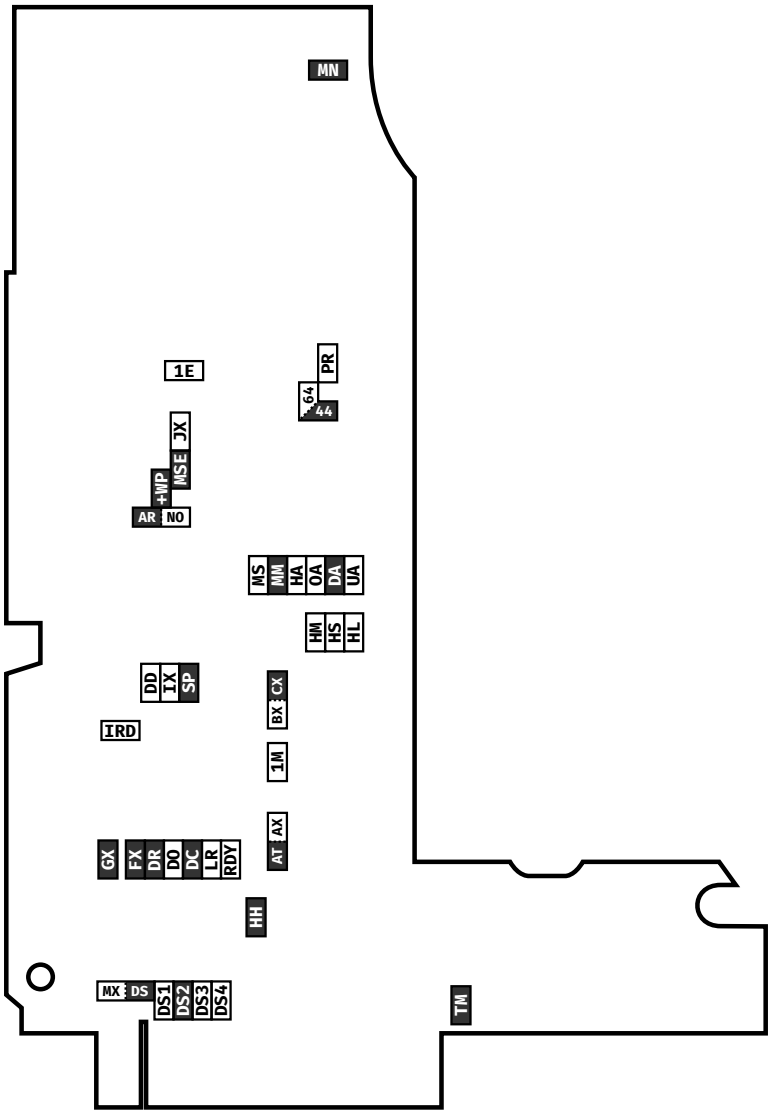

Board number

FPK01281B3

Jumpers DS1, DS2, DS3 and DS4

The DS1 to DS4 jumpers determine the *Drive Select* signal the drive should react to.

Only one of the jumpers must be placed.

For PC-AT interfaces only DS1 and DS2 will function, for Shugart interfaces DS1 to DS4 will work.

When using the drive in a system with PC-AT interface, it should be noted that the *Motor Enable* input signal is only taken from pin number 16. There are two options to handle this issues. The first option is to use a ribbon cable with a twist and place the DS2 jumper on all drives. In this case the drive that is connected behind the twist will be drive 0 and the drive that is connected before the twist will be drive 1. The second option is to use a untwisted ribbon cable and shorting the pin number 10 and pin number 16 together, the DS1 or DS2 jumper of the connected drives can then be placed.

When using the drive in a systems with Shugart interface DS1, DS2, DS3 or DS4 can be placed to make it drive 0, drive 1, drive 2 or drive 3 respectively.

The jumper DS2 will be placed in the default setting.

Jumper 1E

The 1E jumper determines the tracks per inch of the drive.

When the 1E jumper is not placed the drive will operate in 96 TPI mode.

When the 1E jumper is placed the drive will operate in 48 TPI mode.

This jumper is not placed in the default setting.

Jumper 1M

The 1M jumper determines the density mode of the drive.

When the 1M jumper is not placed a high signal on the *Density Select* pin switches the drive into low density mode and a low signal switches the drive into high density mode.

When the 1M jumper is placed the drive will always be in low density mode.

For PC-AT interfaces the 1M jumper should not be placed, this is also the default setting.

Jumpers 64 and 44

Function unknown.

In the default setting the 44 jumper is set via a solder bridge.

Jumpers AR and NO

The AR and NO jumpers influence the track 0 automatic re-calibration.

When the AR jumper is placed the automatic re-calibration is enabled.

When the NO jumper is placed the automatic re-calibration is disabled.

In the default setting the AR jumper is set via a solder bridge.

Jumpers AT and AX

The AT and AX jumpers determine how changes to the *Density Select* should be handled.

When the AT jumper is placed the *Density Select* can be switch at any time.

When the AX jumper is placed the *Density Select* can only be switched when the *Drive Select* signal is inactive, otherwise the changes to the *Density Select* signal will be ignored.

The AT jumper is placed in the default setting.

Jumpers BX and CX

The BX and CX jumpers control whether or not the drives rotational speed should depend on the density mode.

When the CX jumper is placed the rotational speed will always be 360 RPM.

When the BX jumper is placed the rotational speed will be 360 RPM when the drive is in high density mode and 300 RPM when the drive is in low density mode.

For PC-AT interfaces the BX jumper can be placed. The CX jumper is placed in the default setting.

Jumpers DD, IX and SP

The DD, IX and SP jumpers determine when the *Disk Change* signal should be reset.

When DD is placed the *Disk Change* signal will be reset by the *Drive Select* signal.

When IX is placed the *Disk Change* signal will be reset by the *Index* signal.

When SP is placed the *Disk Change* signal will be reset by the *Step* signal.

For PC-AT interfaces the SP jumper should be placed, this is also the default setting.

Jumpers DO, DC, LR and RDY

The DO, DC, LR and RDY jumpers select what signal shall be output on pin number 34.

When DO is placed the *Door Open* signal will be used.

When DC is placed the *Disk Change* signal will be used.

When LR is placed the *Hold Ready* signal will be used.

When RDY is placed the *Ready* signal will be used.

For PC-AT interfaces the DC jumper should be placed, this is also the default setting.

Jumper DR

Function unknown.

In the default setting this jumper is set via a solder bridge.

Jumper FX

The FX jumper enabled or disables the internal track counting.

When the FX jumper is not placed the internal track counting is disabled.

When the FX jumper is placed the internal track counting is enabled.

In the default setting this jumper is set via a solder bridge.

Jumper GX

The GX jumper influences the *Read Data* signal.

When GX is not placed the *Read Data* signal is enabled by the *Drive Select* signal.

When GX is placed the *Read Data* signal is enabled by the *Write Gate*, *Write Protect*, *Drive Select* signals and the head being on a track.

In the default setting this jumper is placed via a solder bridge.

Jumpers HA, OA, DA and UA

The HA, OA, DA and UA jumpers determine the behavior of the drives activity LED in the front panel.

When the UA jumper is placed the activity LED will light up with the *Ready* signal.

When the DA jumper is placed the activity LED will light up with the *Drive Select* signal.

When the OA jumper is placed the activity LED will light up with either the *Drive Select* signal or the *Ready* signal.

When the HA jumper is placed the activity LED will light up when both the *Drive Select* signal and the *Ready* signal are active.

In the default setting the DA jumper is placed.

Jumper HH

Function unknown.

In the default setting this jumper is set via a solder bridge.

Jumpers HM, HL and HS

The HM, HL and HS jumpers determine the source of the internal *Head Load* signal.

When the HM jumper is placed the signal will be derived from the *Drive Select* signal and the *Motor Enable* signal.

When the HL jumper is placed the signal will be derived from the *Drive Select* signal and the *Ready* signal.

When the HS jumper is placed the signal will be derived from the *Drive Select* signal.

In the default setting no jumper is set.

Jumper IRD

Internal Ready Signal. Exact function unknown.

This jumper is not placed in the default setting.

Jumper JX

Function unknown.

This jumper is not placed in the default setting.

Jumper MN

Function unknown.

In the default setting this jumper is set via a solder bridge.

Jumpers MS and MM

The MS and MM jumpers control under what conditions the drive motor should turn on.

When the MM jumper is placed the motor will only turn on when the *Motor Enable* signal is active.

When the MS jumper is placed the motor will only turn on when the *Drive Select* signal is active.

For PC-AT interfaces the MM jumper should be placed, this is also the default setting.

Jumper MSE

Function unknown.

In the default setting this jumper is set via a solder bridge.

Jumpers MX and DS

The MX and DS jumpers define if the drive is in multiplex mode or if it is in regular drive select mode. In multiplex mode the drive is permanently active, as if its *Drive Select* signal was active.

When the DS jumper is placed the drive will function in regular drive select mode, only being active when its *Drive Select* signal is active.

When the MX jumper is placed the drive will always be active regardless of its *Drive Select* signal.

For PC-AT interfaces the DS jumper should be placed, this is also the default setting.

Jumper PR

Function unknown.

This jumper is not placed in the default setting.

Jumper TM

The TM jumper connects or disconnects the 150Ohm termination resistors from the input data lines.

When TM is not placed the termination resistors are isolated from the input data lines.

When TM is placed the input data lines are pulled up to 5V via the termination resistors.

This jumper is placed in the default setting.

Jumper +WP

The +WP jumper influences the *Write Protect* signal on pin number 28.

When the +WP jumper is not placed a low level on pin number 28 indicates an write protected disk has been inserted.

When the +WP jumper is placed a high level on pin number 28 indicates an write protected disk has been inserted.

In the default setting this jumper is set via a solder bridge.