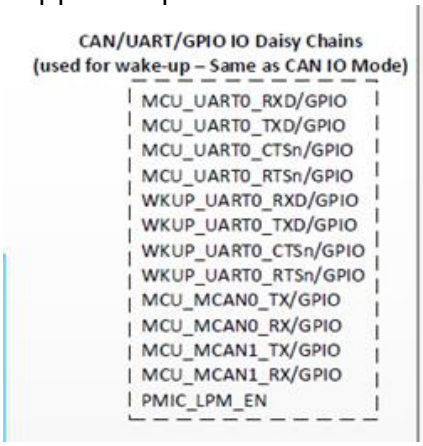
UART wakeup source SK modifications for partial IO low power mode (LPM)

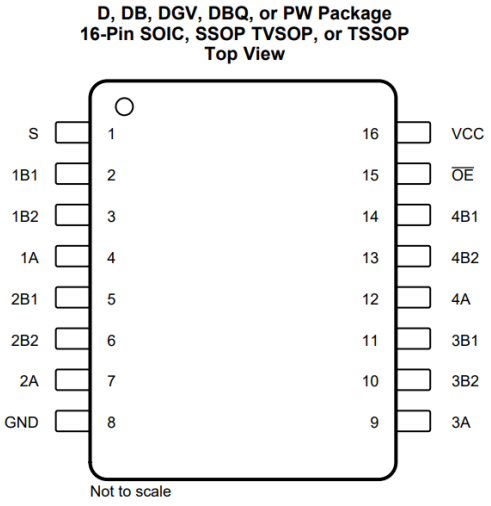
Supported pins



Rework details

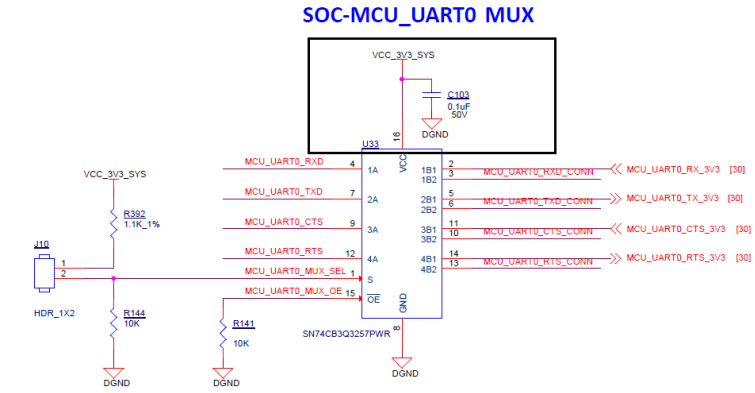
https://www.ti.com/lit/ds/symlink/sn74cb3q3257.pdf

SN74CB3Q3257PWR



SK	Reference Designator	Pin
SK-AM62A-LP	U33	VCC, 16

AM62A schematics reference



OEn	SEL	INPUT/OUTPUT An	
L	L(DEFAULT)	An=nB1	SOC - FT4232

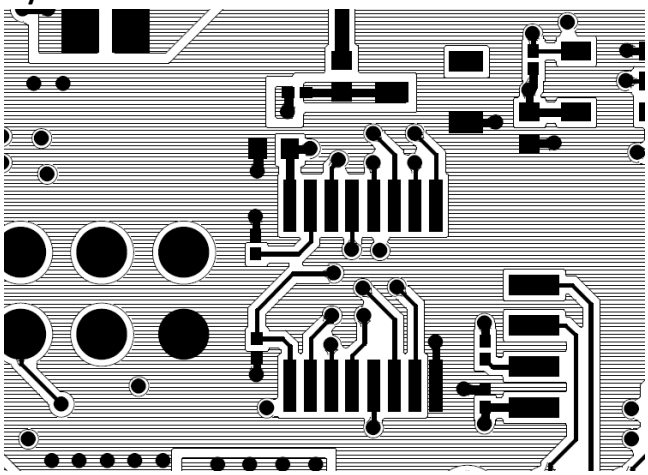
Modifications

Lift pin 16 connected to VCC_3V3_SYS

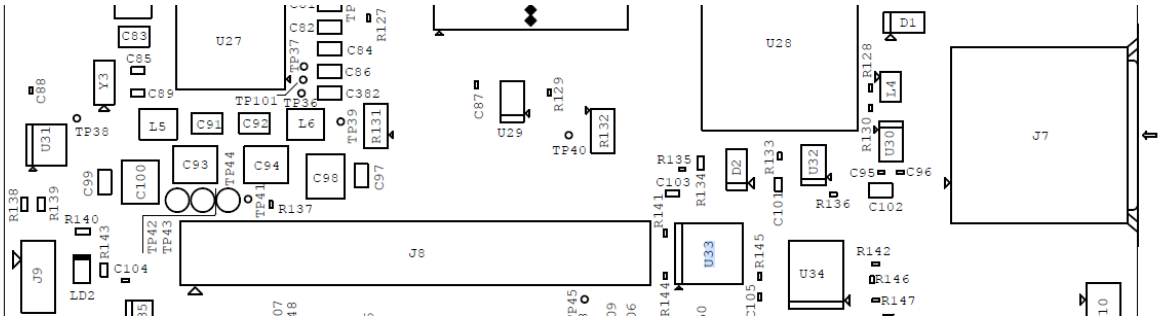
Connect pin 16 to VCC_3V3_MAIN or CAN_IO_3V3 available nearest to the IC

Alternatively, cut the track on the PCB and add a jumper

Layout

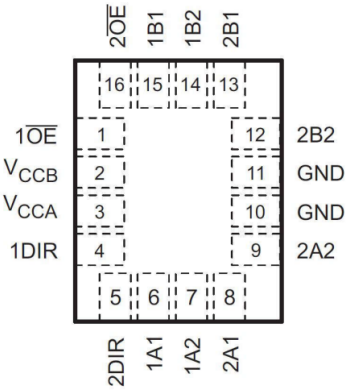


Board Placement



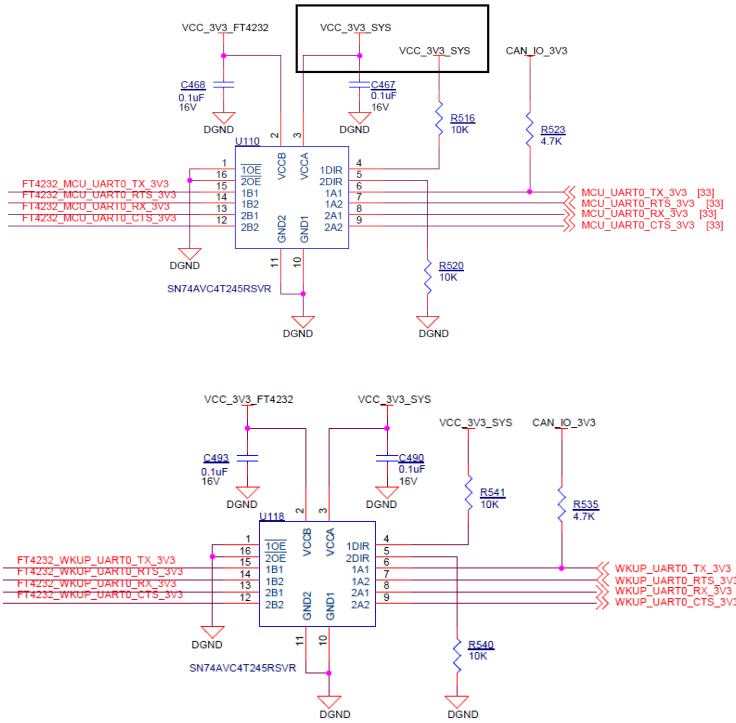
https://www.ti.com/lit/ds/symlink/sn74avc4t245.pdf

SN74AVC4T245RSVR



SK	Reference Designator	Pin
SK-AM62A-LP	U110, U118	VCCA, pin 3 1DIR , pin 4

AM62A schematics reference

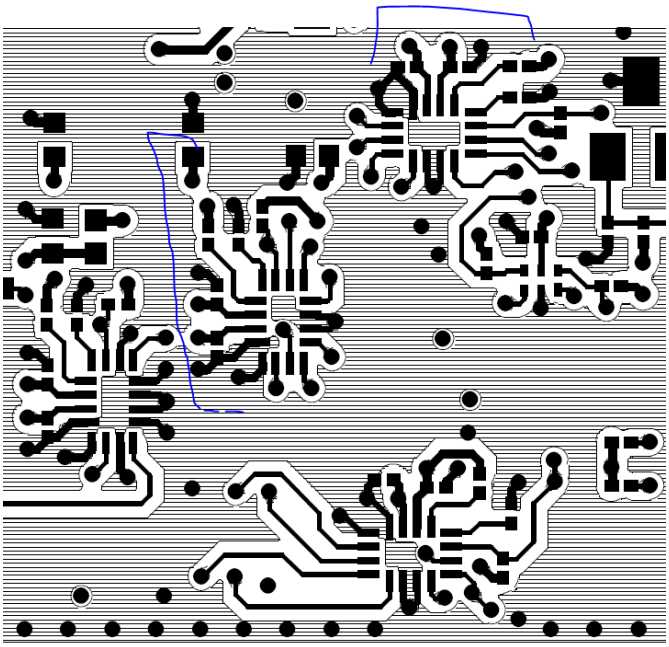


Modifications

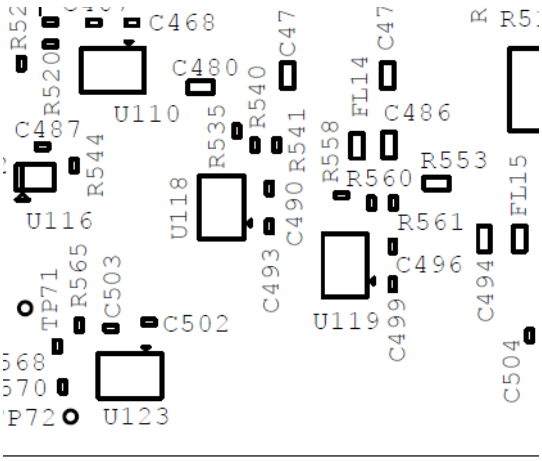
Cut the tracks connecting Pin 3 to VCC_3V3_SYS
Connect pin 3 to CAN_IO_3V3

R516 – Reorient the resistor out of the pad area to disconnect 3V3_SYS and connect CAN_IO_3V3
R541 – Reorient the resistor out of the pad area to disconnect 3V3_SYS and connect CAN_IO_3V3

Layout



Placement



Additional files for reference
Schematics
Searchable assembly file

SK-AM62A-LP Design Package Folder and Files List
https://www.ti.com/lit/pdf/sprt781

Additional Files
Recommended References for review and design of custom board
AM62Ax
https://www.ti.com/lit/an/sprad85/sprad85.pdf
https://www.ti.com/lit/an/sprad21c/sprad21c.pdf
https://www.ti.com/lit/an/sprad66a/sprad66a.pdf
https://e2e.ti.com/support/processors-group/processors/f/processors-forum/1280753/faq-am62a7-am62a7-q1-am62a3-am62a3-q1-custom-board-hardware-design---faqs-related-to-processor-collaterals-functioning-peripherals-interface-and-starter-kit

https://e2e.ti.com/support/processors-group/processors/f/processors-forum/1340905/faq-am62a7-am62a7-q1-am62a3-am62a3-q1---custom-board-hardware-design---design-and-review-notes-for-reuse-of-sk-am62a-lp-schematics
https://e2e.ti.com/support/processors-group/processors/f/processors-forum/1386586/faq-am62x-am64x-custom-board-hardware-design-how-to-handle-used-unused-pins-peripherals-e-g-gpios-serdes-usb-csi-mmc-emmc-sd-card-csi-oldi-dsi