

Jumper and switches on GTFE-9U-card

JP1 (SMD, bottom side): jumper for “CLK_FBIN_EVM”
(default) → not inserted.

JP2 (SMD, bottom side): TRST (JTAG) of VME-chip
1-2 (default) → solder R with 10K (LV3V3), TRST inactive.
2-3 → do not solder.

JP3 (SMD, top side): SEL06 of ICS8705
2-3 (default) → R0805 with 0Ω inserted (SEL06 = GND).

JP4 (SMD, bottom side): VME64x-chip in JTAG-chain
1-2 → VME64x-chip in JTAG-chain.
2-3 (default) → VME64x-chip **not** in JTAG-chain.

JP5 (SMD, top side): PROM of VME64x-chip in JTAG-chain
1-2 (default) → PROM of VME64x-chip in JTAG-chain.
2-3 → PROM of VME64x-chip **not** in JTAG-chain.

JP6 (SMD, bottom side): VME-chip in JTAG-chain
1-2 → VME-chip in JTAG-chain.
2-3 (default) → VME-chip **not** in JTAG-chain.

JP7 (SMD, top side): PROM of VME-chip in JTAG-chain
1-2 (default) → PROM of VME-chip in JTAG-chain.
2-3 → PROM of VME-chip **not** in JTAG-chain.

JP8 (SMD, top side): SEL05 of ICS8705
2-3 (default) → R0805 with 0Ω inserted (SEL05 = GND).

JP9 (SMD, top side): SEL04 of ICS8705
1-2 (default) → R0805 with 0Ω inserted (SEL04 = LV3V3).

JP10 (SMD, top side): SEL03 of ICS8705
1-2 (default) → R0805 with 0Ω inserted (SEL03 = LV3V3).

JP11 (SMD, top side): SEL02 of ICS8705
2-3 (default) → R0805 with 0Ω inserted (SEL02 = GND).

JP12 (SMD, top side): SEL01 of ICS8705
1-2 (default) → R0805 with 0Ω inserted (SEL01 = LV3V3).

JP13 (SMD, top side): SEL00 of ICS8705
1-2 (default) → R0805 with 0Ω inserted (SEL00 = LV3V3).

JP14 (top side): selection of CLKIN (CLKIN_SEL)
1-2 → oscillator-clock (CLK_OSC) selected.
2-3 → clock from backplane (CLK_FROM_TIM) selected.

JP15 (SMD, top side): VREF for Parallel-Cable-IV
(default)→ nothing inserted.

JP16 (SMD, top side): selection of VIO of masterblaster
(default)→ R0805 with 0Ω inserted.

JP17 (SMD, top side): jumper for “TMS-signals” for TTCRQ. These jumpers are set in the same way as JP41.
OFF → chip **not** in JTAG-chain.
ON (default)→ chip in JTAG-chain.

JP18, JP19, JP20 and JP38 (SMD, top side): jumper for “TMS-signals” for PROMs of EVM-chip. These jumpers are set in the same way as JP46-JP49.

OFF → chip **not** in JTAG-chain.
ON (default)→ chip in JTAG-chain.
JP20 => JP46: PROM1 of DAQ-chip
JP19 => JP48: PROM2 of DAQ-chip
JP18 => JP47: PROM3 of DAQ-chip
JP38 => JP49: PROM4 of DAQ-chip

JP21, JP22, JP24 and JP37 (SMD, top side): jumper for “TMS-signals” for PROMs of DAQ-chip. These jumpers are set in the same way as JP50-JP53.

OFF → chip **not** in JTAG-chain.
ON (default)→ chip in JTAG-chain.
JP24 => JP53: PROM1 of DAQ-chip
JP21 => JP51: PROM2 of DAQ-chip
JP22 => JP52: PROM3 of DAQ-chip
JP37 => JP50: PROM4 of DAQ-chip

JP23, JP30, JP31 and JP32 (SMD, bottom side): jumper CARD_NR
(default)→ setting as CARD_NR.

JP24 see JP21.

JP25 (SMD, top side): HSWAP_EN input of DAQ-chip
1-2 → HSWAP_EN=LV3V3, keeps jumper in OFF-position (I/O-pins in high-Z before configuration). In this position **configuration of PSB-chip via VME not possible**.
2-3 (default)→ HSWAP_EN=GND, enables pull-up-Rs of all I/O-pins in PSB-chip before configuration. In this position **configuration of PSB-chip via VME possible**.

JP26 (SMD, bottom side): jumper for “CLK_FBIN_DAQ”
(default)→ not inserted.

JP27, JP28 and JP29 (top side): jumper for LV1V5
(default)→ solder-bridges after voltage-testing.

JP30-JP32 see JP23.

JP33 (SMD, bottom side): INIT_DONE of VME64x-chip
1-2→ R0805 with 1k.

JP33 and JP34 (SMD, bottom side): INIT_DONE of VME64x-chip
Connection of JP33/pin 2 with JP34/pin 2 (R0805 with 0Ω).

JP35 and JP36 (SMD, bottom side): not used
(default)→ nothing inserted.

JP37 see JP21.

JP38 see JP18.

JP39 (top side): jumper for “SEL_CABLE_JTAG”
OFF (default)→ selection via VME.
ON → MB and PC-IV selected for JTAG.

JP40 (SMD, top side): voltage selection for masterblaster
1-2 (default)→ LV3V3.
2-3 → VCC.

JP41 (SMD, top side): TTCRQ in JTAG-chain
1-2 → TTCRQ in JTAG-chain.
2-3 (default)→ TTCRQ **not** in JTAG-chain.

JP42 (SMD, top side): SLINK64 EVM in JTAG-chain
1-2 → SLINK64 EVM in JTAG-chain.
2-3 (default)→ SLINK64 EVM **not** in JTAG-chain.

JP43 (SMD, top side): SLINK64 DAQ in JTAG-chain
1-2 → SLINK64 DAQ in JTAG-chain.
2-3 (default)→ SLINK64 DAQ **not** in JTAG-chain.

JP44 does not exist in design.

JP45 (SMD, bottom side): TRST (JTAG) of VME64x-chip
1-2 (default)→ solder R with 10K (LV3V3), TRST inactive.
2-3 → do not solder.

JP46 (SMD, top side): 1st PROM of DAQ-chip in JTAG-chain
1-2 (default)→ in JTAG-chain.
2-3→ **not** in JTAG-chain.

JP47 (SMD, top side): 3rd PROM of DAQ-chip in JTAG-chain
1-2 (default)→ in JTAG-chain.
2-3→ **not** in JTAG-chain.

JP48 (SMD, top side): 2nd PROM of DAQ-chip in JTAG-chain
1-2 (default)→ in JTAG-chain.
2-3→ **not** in JTAG-chain.

JP49 (SMD, top side): 4th PROM of DAQ-chip in JTAG-chain
1-2 (default)→ in JTAG-chain.
2-3→ **not** in JTAG-chain.

JP50 (SMD, top side): 4th PROM of DAQ-chip in JTAG-chain
1-2 (default)→ in JTAG-chain.
2-3→ not in JTAG-chain.

JP51 (SMD, top side): 2nd PROM of DAQ-chip in JTAG-chain
1-2 (default)→ in JTAG-chain.
2-3→ not in JTAG-chain.

JP52 (SMD, top side): 3rd PROM of DAQ-chip in JTAG-chain
1-2 (default)→ in JTAG-chain.
2-3→ not in JTAG-chain.

JP53 (SMD, top side): 1st PROM of DAQ-chip in JTAG-chain
1-2 (default)→ in JTAG-chain.
2-3→ not in JTAG-chain.

JP54 (SMD, bottom side): DAQ-chip in JTAG-chain
1-2 → DAQ-chip in JTAG-chain.
2-3 (default)→ DAQ-chip not in JTAG-chain.

JP55 (SMD, bottom side): EVM-chip in JTAG-chain
1-2 → EVM-chip in JTAG-chain.
2-3 (default)→ EVM-chip not in JTAG-chain.

JP56 (SMD, top side): “emergency-jumper” for NVME_CONF_DAQ
(default)→ nothing inserted.

JP57 (SMD, top side): “emergency-jumper” for NVME_CONF_EVM
(default)→ nothing inserted.

JP58, JP59, JP60 and JP61 (SMD, top side): jumper for UFS-signals of SLINK64 DAQ.
2-3 (default)→ R0805 0Ω inserted (for standard 64 bit transfer).

JP62, JP63, JP64 and JP65 (SMD, top side): jumper for LFS-signals of SLINK64 DAQ.
2-3 (default)→ R0805 0Ω inserted (for standard 64 bit transfer).

JP66 (SMD, top side): jumper for RESV0 of DAQ.
(default)→ nothing inserted.

JP67 (SMD, top side): jumper for RESV1 of DAQ.
(default)→ nothing inserted.

JP68 (SMD, top side): jumper for RESV2 of DAQ.
(default)→ nothing inserted.

JP69, JP70, JP71 and JP72 (SMD, top side): jumper for UFS-signals of SLINK64 EVM.
2-3 (default)→ R0805 0Ω inserted (for standard 64 bit transfer).

JP73, JP74, JP75 and JP76 (SMD, top and bottom side): jumper for “TMS-signals” for PROMs and VME-chips. These jumpers are set in the same way as JP4-JP7.

OFF → chip **not** in JTAG-chain.

ON (default) → chip in JTAG-chain.

JP76 => JP4: VME64x-chip

JP75 => JP5: PROM of VME64x-chip

JP74 => JP6: VME-chip

JP73 => JP7: PROM of VME-chip

JP77 (SMD, top side): N_IACKIN/N_IACKOUT

ON → always on, no interrupt.

JP78 and JP79 (top side): jumper for LV2V5_VME

(default) → solder-bridges after voltage-testing.

JP80, JP81, JP82 and JP83 (SMD, top side): jumper for LFS-signals of SLINK64 EVM.

2-3 (default) → R0805 0Ω inserted (for standard 64 bit transfer).

JP84 (SMD, top side): jumper for RESV0 of EVM.

(default) → nothing inserted.

JP85 (SMD, top side): jumper for RESV1 of EVM.

(default) → nothing inserted.

JP86 (SMD, top side): jumper for RESV2 of EVM.

(default) → nothing inserted.

JP87 (SMD, top side): HSWAP_EN input of EVM-chip

1-2 → HSWAP_EN=LV3V3, keeps jumper in OFF-position (I/O-pins in high-Z before configuration). In this position **configuration of PSB-chip via VME not possible**.

2-3 (default) → HSWAP_EN=GND, enables pull-up-Rs of all I/O-pins in PSB-chip before configuration. In this position **configuration of PSB-chip via VME possible**.

JP88 does not exist in design.

JP89, JP90 and JP91 (top side): jumper for LV2V5

(default) → solder-bridges after voltage-testing.

JP92 (SMD, bottom side): jumper for “TMS-signals” for DAQ. These jumpers are set in the same way as JP54.

OFF → chip **not** in JTAG-chain.

ON (default) → chip in JTAG-chain.

JP93 (SMD, bottom side): jumper for “TMS-signals” for EVM. These jumpers are set in the same way as JP55.

OFF → chip **not** in JTAG-chain.

ON (default) → chip in JTAG-chain.

JP94 (SMD, top side): jumper for “TMS-signals” for SLINK64 DAQ. These jumpers are set in the same way as JP43.

OFF → chip **not** in JTAG-chain.

ON (default) → chip in JTAG-chain.

JP95 (SMD, top side): jumper for “TMS-signals” for SLINK64 EVM. These jumpers are set in the same way as JP42.

OFF → chip **not** in JTAG-chain.

ON (default) → chip in JTAG-chain.

JP96 (top side): V_SEL_CABLES

1-2 (default) → solderbridge inserted (V_SEL_CABLES to VME-chip).

JP97 (top side): V_SEL_BACKPL

1-2 (default) → solderbridge inserted (V_SEL_BACKPL to VME-chip).

X1, X6-X8, X10-X11 (SMD, top side): jumper for SCANPSC

(default) → nothing inserted.

X2-X5, X13-X14: not used in design for jumpers.

X9 (SMD, top side): jumper for RUNNING (after power-up)

2-3 (default) → R0805 with 0Ω inserted.

X12: does not exist in design.