NOTES:

ADSP21020
EVDD: A5, A9, A13, J1, J18, N1, N18, U9, U13, K18
IVDD: D9, J4, J15, R9
EGND: H18, A3, A7, A11, A15, E1, G1, L1, L18, R1, R18, T18, U5, U7, U11, U15
IGND: D11, G4, L4, L15, R7, R11

ADSP21020
IT MUST BE POWERED BY +VCORE LINE

+VDSP — EVDD
+5VD
+5VD
DGND — DGND
FLAG0 — FLAG0
FLAG1 — FLAG1
FLAG2 — FLAG2
FLAG3 — FLAG3
DMD[0..39] — DMD[0..39]
PMD[0..47] — PMD[0..47]
DMACK — DMACK
PMACK — PMACK
D\M\T\S\ — \DMTS
P\M\T\S\ — \PMTS
B\R\ — \BR
R\E\S\E\T\ — \RESET
CLK — CLK
EZ_CLK — EZ_CLK
I\R\Q\0\ — \IRQ0
I\R\Q\1\ — \IRQ1
I\R\Q\2\ — \IRQ2
I\R\Q\3\ — \IRQ3

U26

PMA[0..21] → PMA0 L17, PMA1 M18, PMA2 M15, PMA3 M16, PMA4 M17, PMA5 N17, PMA6 N16, PMA7 N15, PMA8 P18, PMA9 P17, PMA10 R17, PMA11 S18, PMA12 P15, PMA13 P16, PMA14 S17, PMA15 R16, PMA16 R15, PMA17 U18, PMA18 S16, PMA19 T17, PMA20 U17, PMA21 R14, S15, T16

PMD[0..47] → PMD0 F2, PMD1 F1, PMD2 J3, PMD3 H2, PMD4 H1, PMD5 J2, PMD6 K4, PMD7 K3, PMD8 K2, PMD9 K1, PMD10 L3, PMD11 L2, PMD12 M1, PMD13 M2, PMD14 M3, PMD15 M4, PMD16 N2, PMD17 N3, PMD18 P1, PMD19 P2, PMD20 N4, PMD21 S1, PMD22 P3, PMD23 R2, PMD24 P4, PMD25 R3, PMD26 S2, PMD27 T1, PMD28 S3, PMD29 R4, PMD30 T2, PMD31 U1, PMD32 T3, PMD33 R5, PMD34 S4, PMD35 U2, PMD36 S5, PMD37 T4, PMD38 R6, PMD39 U3, PMD40 U4, PMD41 S6, PMD42 T6, PMD43 S7, PMD44 U5, PMD45 T7, PMD46 R8, PMD47 S8

\PMS0 R13, \PMS1 T15 → PMS0, PMS1
\PMWR U8, \PMRD S9 → PMWR, PMRD
S14, \PMTS T8, PMACK U10 → PMPAGE, PMTS, PMACK
\IRQ0 J17, \IRQ1 J16, \IRQ2 K16, \IRQ3 K15 → IRQ0, IRQ1, IRQ2, IRQ3
\RESET R10, L16 → RESET, TIMEXP
CLK T11 → CLKIN
U12 → RCOMP
+5VD — R145 — C58

ADSP-21020_PGA

DMA[0..27] → DMA0 G16, DMA1 G17, DMA2 F18, DMA3 F17, DMA4 F16, DMA5 F15, DMA6 E18, DMA7 E17, DMA8 E16, DMA9 D18, DMA10 E15, DMA11 D17, DMA12 D16, DMA13 C18, DMA14 C17, DMA15 D15, DMA16 B18, DMA17 B17, DMA18 C16, DMA19 D14, DMA20 C15, DMA21 B16, DMA22 A16, DMA23 D13, DMA24 C14, DMA25 B15, DMA26 B14, DMA27 D12, C13, A13, B13, C12

DMD[0..39] → DMD0 H3, DMD1 H4, DMD2 E2, DMD3 G3, DMD4 D1, DMD5 D2, DMD6 F3, DMD7 C1, DMD8 C2, DMD9 F4, DMD10 E3, DMD11 D3, DMD12 B1, DMD13 E4, DMD14 B2, DMD15 C3, DMD16 A2, DMD17 D4, DMD18 B3, DMD19 A4, DMD20 C4, DMD21 B4, DMD22 D5, DMD23 A5, DMD24 C5, DMD25 B5, DMD26 B6, DMD27 C6, DMD28 A6, DMD29 C7, DMD30 D7, DMD31 B7, DMD32 B8, DMD33 A10, DMD34 C8, DMD35 D8, DMD36 B9, DMD37 C9, DMD38 B10, DMD39

DMS0 D10, DMS1 C11, DMS2 A12, DMS3 B11 → \DMS0, \DMS1, \DMS2, \DMS3
DMWR T13, DMRD S11 → \DMWR, \DMRD
DMPAGE S12, DMTS T12, DMACK → \DMTS, DMACK
BR A18, BG A17 → \BR, \BG
FLAG0 H16, FLAG1 H15, FLAG2 H17, FLAG3 G18 → FLAG0, FLAG1, FLAG2, FLAG3
TDO R12, TDI S13, TRST T14, TCK U14, TMS U16 → TDO, TDI, \TRST, TCK, TMS

JP12: 12 11, 10 9, 8 7, 6 5, 4 3, 2 1 — JTAGPU — GND

TEST CONNECTOR
JP15: 1 2, 3 4, 5 6, 7 8, 9 10, 11 12, 13 14, 15 16, 17 18, 19 20, 21 22, 23 24, 25 26, 27 28, 29 30, 31 32, 33 34, 35 36, 37 38
CLK — CLK
DGND
DMD23, DMD22, DMD21, DMD20, DMD19, DMD18, DMD17, DMD16, DMD15, DMD14, DMD13, DMD12, DMD11, DMD10, DMD9, DMD8 — DMD39, DMD38, DMD37, DMD36, DMD35, DMD34, DMD33, DMD32, DMD31, DMD30, DMD29, DMD28, DMD27, DMD26, DMD25, DMD24
DMD[0..39] — DMD[0..39]

AMP MICTOR38

DMA[0..27] → DMA[0..27]
PMA[0..21] → PMA[0..21]

R139: DMD0 1 … DMD12 13 → R1 … R13; VCC 14; GND
R140: DMD13 1 … DMD25 13 → R1 … R13; VCC 14; GND
R141: DMD26 1 … DMD38 13 → R1 … R13; VCC 14; GND
R142: DMD39 1, FLAG0 2, FLAG1 3, FLAG2 4, FLAG3 5 → R1 … R13; VCC 14; GND
R143: PMACK 1, DMACK 2, \IRQ0 3, \IRQ1 4, \IRQ2 5, \IRQ3 6, \PMTS 7, \DMTS 8, \DMS0 9, \DMS1 10, \DMS2 11, \DMS3 12, \RESET 13 → R1 … R13; VCC 14; +5VD
R144: JTAGPU 1, \PMS0 2, \PMS1 3, \BR 4, \PMWR 5, \PMRD 6, \DMWR 7, \DMRD 8, \BG 9 → R1 … R13; VCC 14; +5VD

DMA[0..27] — DMA[0..27]
PMA[0..21] — PMA[0..21]
\PMWR — P\M\W\R\
\PMRD — P\M\R\D\
\PMS0 — P\M\S\0\
\PMS1 — P\M\S\1\
\BG — B\G\
\DMWR — D\M\W\R\
\DMRD — D\M\R\D\
\DMS0 — D\M\S\0\
\DMS1 — D\M\S\1\
\DMS2 — D\M\S\2\
\DMS3 — D\M\S\3\

EVDD — C59 — C60 C61 C62 C63 C64 C65 C66 C67 C68 C69 C70 C71 C72 C73 — GND
IVDD — DGND EGND IGND
VDD — VSS

+5VD VCC +5V
+5VD

FILTER CAPACITORS:
DSP: 1 capacitor near each IVDD and EVDD pin

REV.	DATE	DRAWN	CHECK	ENG.	PR.ASS.	C. of C.	CHANGE AUTORITY
/							

CUSTOMER ID:
EFFECTIVITY:
CARLO GAVAZZI SPACE

DRAWING TITLE: HSO/FIRST-DPU
CPU BOARD
DSP_PGA

SCALE:
GEN TOL.
GEN PA

HIGHER ASSEMBLY: DPU-EM-110.000
DRAWING NUMBER: DPU-EM-110.020
SHEET OF: 6 8