Infineon Power for Versal Prime VM1302 Versal AI Core VC1502 UC2 -SERDES

XILINX VERSAL UC2

power stage options:
TDA21242, IR3550, IR3555

IRPS5401 (1)
- Ch A — **TDA21240**
- Ch B
- Ch C
- Ch D
- LDO

1 — 0.70V - 20A to 30A+
2 — 1.5V - 2A VCCO option
3 — VCC_IO, VCCBRAM, VCC_SOC 0.78V / 7A-8A
4 — open - 0.5A VCCO_PMIO

* if highest efficiency need on VCCINT, alternative is IR3889.

IRPS5401 used on UltraZED, Ultra96 ZCU-104; ZCU-111

power stage options:
TDA21240 (40A)

IRPS5401 (2)
- Ch A — **TDA21242**
- Ch B
- Ch C
- Ch D
- LDO

7 — 1.2V - 6A (4.81A) **
8 — 1.5V / 2A (0.29A)
9 — 0.88V - 3.08A (4A)
10 — 1.5V - 4A
11 — open - <500mA (option I/O)

**xilinx expects slight increase in current on VTT rail (4.81A)

IR3883 — 12 — 3.3V - 3A system voltage

IR3883 — 13 — 5V - 3A system rail

IR3883 — 14 — VCCO 1.1V to 3.3V / <3A

VERSAL

PL & AI ENGINE

VCCINT	0.70 (UC2)
VCCAUX	1.5V
VCC_SOC	0.78 (UC2)
VCCBRAM	0.78 (UC2)
VCCINT_IO	0.78 (UC2)
VCCO (HDIO)	1.1-3.3V
VCCO (HPIO)	1-1.8V
VMGTAVCC	0.88V
VMGTAVCCAUX	1.5V
VMGTAVTT	1.2V

PS Scalar Engine

VCC_PSINTLP	0.7 (UC2)
VCC_PSINTFP	0.7 (UC2)
VCCO_PMIO (0:n)	1.2- 3.3V
	other

PMC

VCC_PMC	0.7 (UC2)
VCCAUX_PMC	1.5V
VCCAUX_SMON	1.5V
VCCO_PMIO (0:n)	1.2- 3.3V
VREFP	1.024V

IR3889 - 10A to 20A+
IR3899 - +/- 9A
IR3898 - +/- 6A
IR3897 - +/- 4A

IR3898 — 5 — 1.2V / 6A

IR3897 — 6 — 0.6V / +/-3A

DDR3/DDR4

VTT = VDDQ/2
VDD