

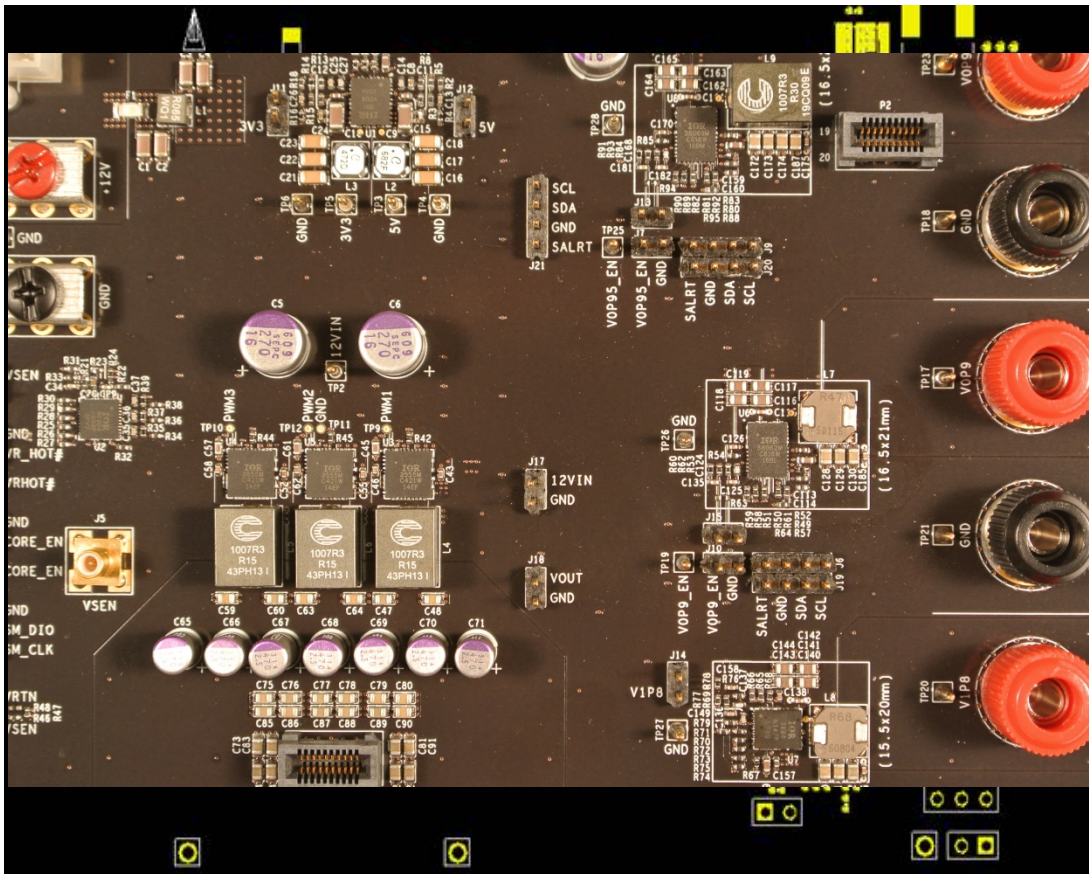
Infineon:

Arria 10 – 160W – 50W

EVAL_35204-PMAC1 Coming Soon.

www.infineon.com/altera





READY TO GO DESIGNS

IR35204 + Power Stages

- Scalable multi-phase controller (Salem)
- PMBus/I2C
- VID capability Macro designs available

Set designs:

- 3-phase: > 90A, 65A, < 45A
- 2-phase: >50A, 35A

IR38063/62 - 25A /15A

Integrated FET PMBus POL

- Delivers excellent efficient at best thermal ratings
- High DC accuracy < 1%
- PMBus capability
- Proven low noise SERDES solution

PowIRStage	L (nH)	Fsw (kHz)	2-phase (A)	3-phase (A)
IR3555	150	500	60	90
IR3556	175	500	45	67.5
IR3557	215	500	30	45

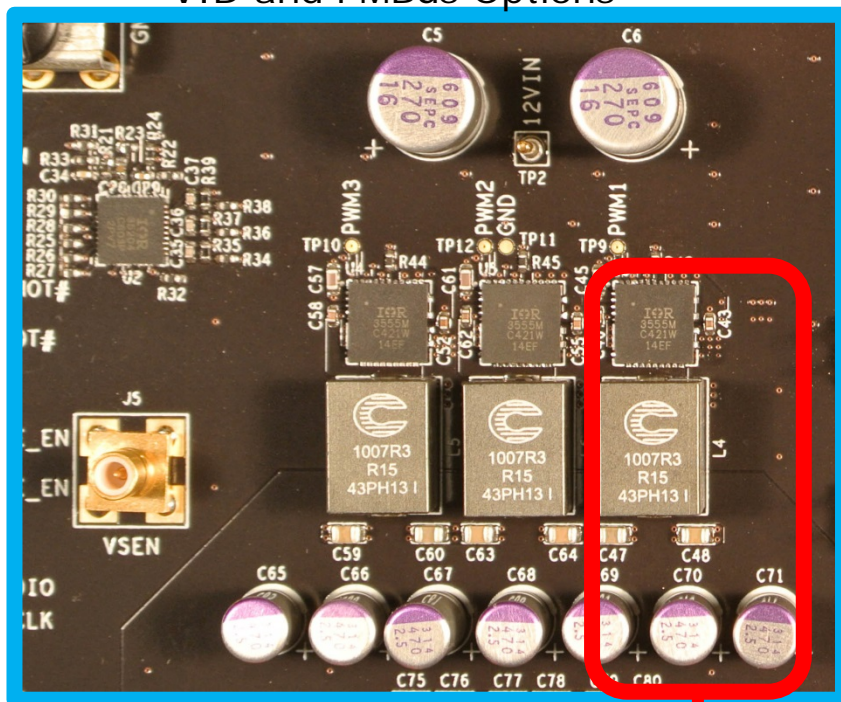
Example 3-phase Core Rail to 90A + POL

Arria 10 / Stratix X or Virtex/Kintex --- 3-phase / 2-phase Power Macro

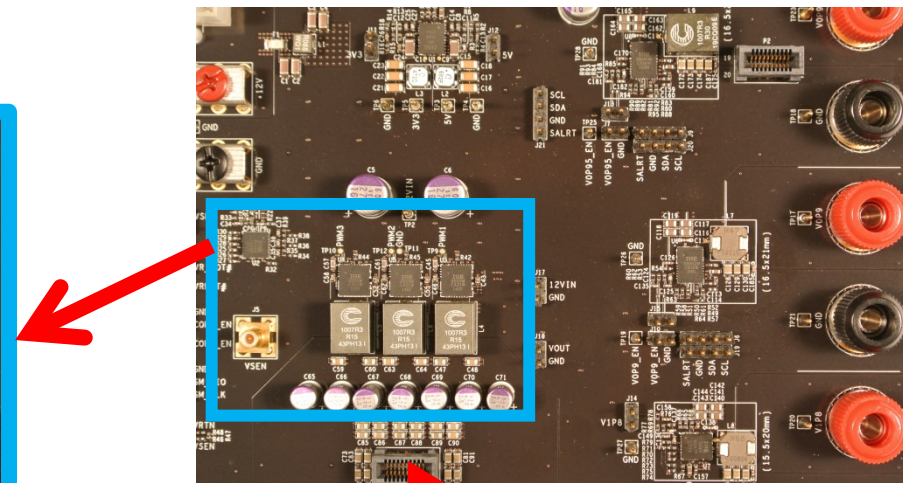
3-phase Scalable **45A to 90A** Core Rail

0.95V +/-30mV

VID and PMBus Options



50mm



DETAIL

IR35205 +
IR355x

40mm

Option
remove

2-phase 30-45A Core Rail

0.95V +/-30mV

VID and PMBus Options

Includes Mini-Slammer
to test transient loads

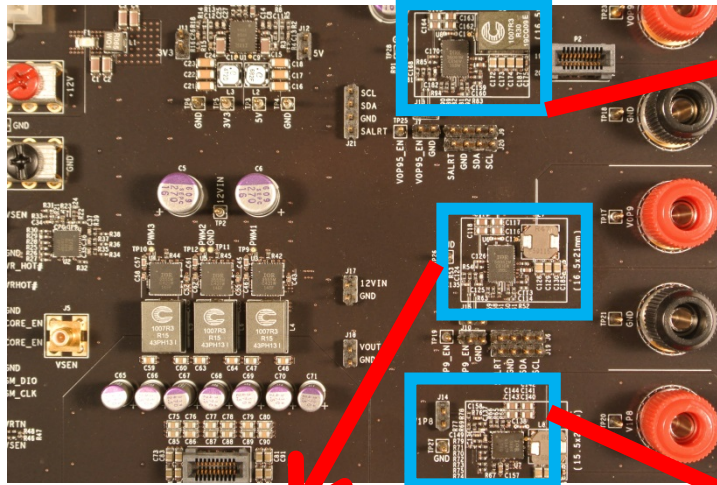
Optional designs with SMT inductors and capacitors

Example VCCERAM, SERDES, Bus I/O Rails

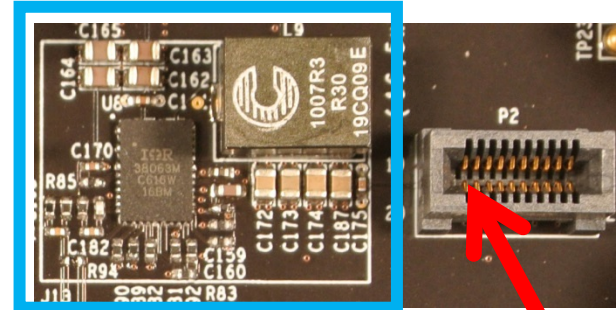
Arria 10 / Stratix X or Virtex/Kintex



DETAIL



VCCERAM 15A PMBus
0.90V +/-30mV



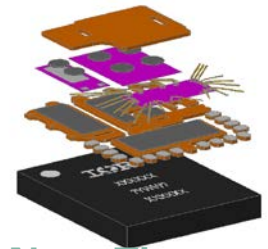
16 mm

IR38062 22 mm

Includes Mini-Slammer to test transient loads

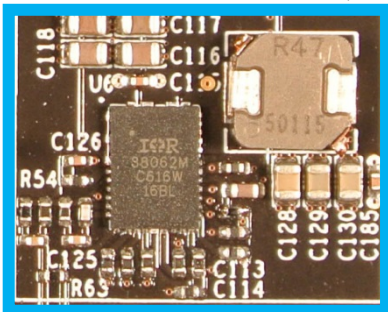
VCCT_GXB, VCCR_GXB SERDES
25A PMBus
0.95V +/-30mV, <10mV pp ripple

Excellent over temperate



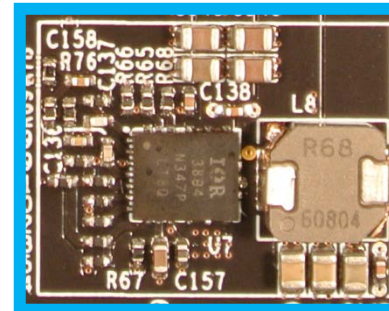
New Thermal Enhanced Package with Cu clip

VCCIO 1.8V 12A Bus I/O, Platform



15 mm

IR3894 20 mm



15 mm

IR38063 20 mm

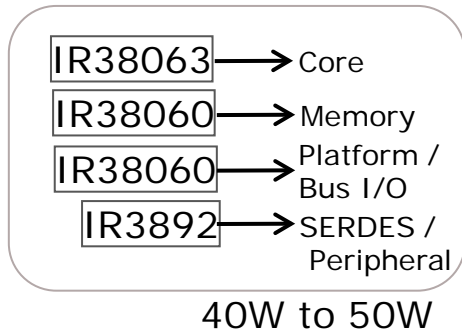
FAE Primer

Customers refer this as "66" family
Or "660" k-logic gates



Altera Arria 10

Product Line	GX480 / SX480	GX570 / SX570	GX660 / SX660	GX900	GX1150
Ref #	10AX48 / 10AS48	10AX570 / 10AS570	10AX66 / 10AS66	10AX900	10AX115

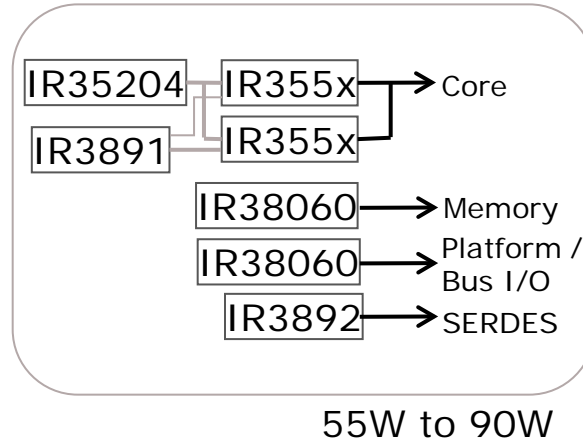


Ref Design/Evals:

- EVAL_38060-PMAC1
- IRDC38063,
- IRDC38060, IRDC3892

Alternative Devices:

- Analog SupIRBucks
 - IR3883, IR3823, IR3897
 - IR3847, IR3846, IR3448, IR3891
- LDO
 - IFX1763 (3.3V, 1.2V, 1.5V, 1.35V)
 - TLS208D1LDV (1.2V, 1.0V)

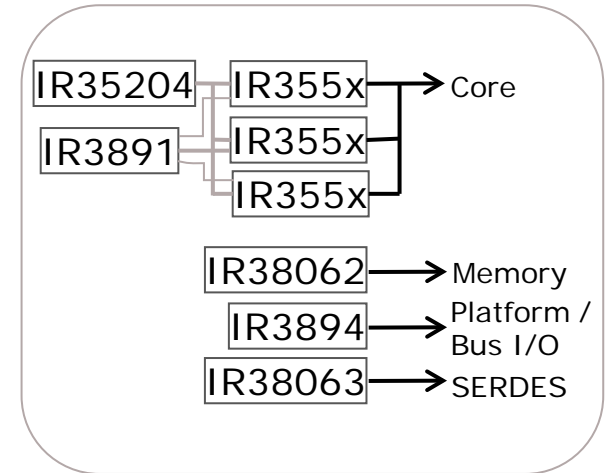


Ref Design/Evals:

- EVAL_35204-PMAC– Core Rail
- EVAL_38060-PMAC1
- Other POL rails
- IRDC38060, IRDC3892

Alternative Devices:

- Analog SupIRBucks
 - IR3883, IR3823, IR3897, IR3891
- LDO
 - IFX1763 (3.3V, 1.2V, 1.5V, 1.35V)
 - TLS208D1LDV (1.2V, 1.0V)



Ref Design/Evals:

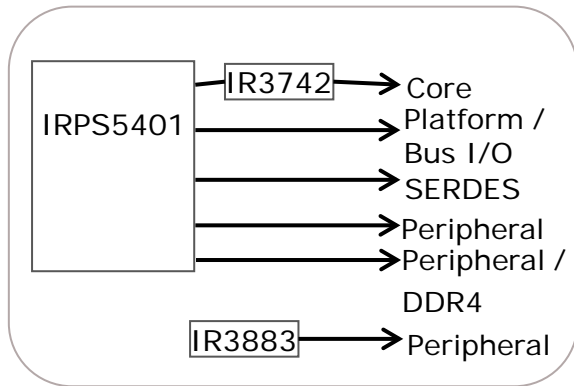
- EVAL_35204-PMAC– Core + POL
- IRDC38062, IRDC3891

Alternative Devices:

- Analog SupIRBucks
 - IR3883, IR3823, IR3897
 - IR3847, IR3846, IR3448, IR3891
- LDO
 - IFX1763 (3.3V, 1.2V, 1.5V, 1.35V)
 - TLS208D1LDV (1.2V, 1.0V)

Altera Arria 10

Product Line	GX160 / SX160	GX220 / SX220	GX270 / SX270	GX320 / SX320	GX480 / SX480
Ref #	10AX16 / 10AS16	10AX22 / 10AS22	10AX27 / 10AS27	10AX32 / 10AS32	10AX48 / 10AS48



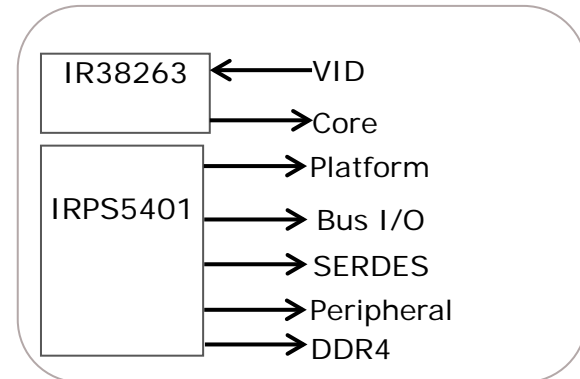
20W to 25W

Ref Design/Evals:

Schematics available
 DB296 – IRPS5401
 IRDC3883

Alternative Devices:

SupIRBucks: IR3883, IR3823, IR3898
 IR3847, IR3846, IR3891
 PMBus: IR38063, IR38062
 LDO
 IFX1763 (3.3V, 1.2V, 1.5V, 1.35V)
 TLS208D1LDV (1.2V, 1.0V)



30W to 40W

Ref Design/Evals:

DB295 – IRPS5401
 IRDC38263 (tba)

Alternative Devices:

SupIRBucks: IR3883, IR3823, IR3898
 IR3847, IR3846
 PMBus: IR38063, IR38062

LDO

IFX1763 (3.3V, 1.2V, 1.5V, 1.35V)
 TLS208D1LDV (1.2V, 1.0V)