Continuity

Test parameters

**cont\_fct** - 1)Force 0V to fContPins,VDD\_V

2)Force -1.5 mA to fContPin

**cont\_pmu** -1) Force -1.5 mA to fContPin

**wrong orientation** - 1) Force 1mA to VDD, fContPins3 and measure voltage to check wrong

orientation at pin VDD

Supply current

Test parameters

**iddhv\_low\_power** - 1) open the relays of 'allPins'and set vih has 3.2v and vil has 0.1v,

Close 'pfmon' and 'sdeol'relays

2)force 10v and 13v to 'g\_VDDNom' and measure current in

'g\_VDDNom'

3)again force 13v to 'g\_VDDNom' and open the relay of SDEOL

Regulator voltage

Test parameters

**vdd\_noTrim** - 1) force -0.5uA to 'VDD\_V' and measure voltage

Input leakage current

Test parameters

**ileakl\_sdeol** - 1) Force 0.1v and measure voltage in 'sdeol'

**iinl\_lsout** - 1)Force 0.1v and measure voltage in 'lsout'

**ileakh\_sdeol** – 1)Force 3v and measure voltage in 'sdeol'

**iinh\_lsout** - 1)Force 3v and measure voltage in 'lsout'

**ileak\_hsout** - 1) Force 1.1v and measure voltage in 'hsout'

**ileakl\_pfmon** - open pfmon relay and force 0.1v and measure voltage in 'pfmon'

**ileakh\_pfmon** – 1) Force 3v and measure voltage in 'pfmon'

**iinh\_pfout** - Close pfmon relay and open pfout relay then Force 3v and measure

voltage in 'pfout'

**iinl\_pfout** - 1)Force 0.1v and measure voltage in 'pfout' , close 'pfmon' 'pfout' relay

then open 'gpIinPins' relay.

Line- and load regulation

Test parameters

**Vvdd\_NoLoad** - Force -0.5uA to VDD\_V and measure voltage

**Vvdd\_load** - Force -10uA to VDD\_V and measure voltage

**Vvdd\_line\_max** - close the relays of VDDHV\_V and force -0.5uA and measure voltage,

set voltage level has 14v.

**Vvdd\_line\_min** - close the relays of VDDHV\_V and force -0.5uA and measure voltage,

set voltage level has 9v and bring back to nominal voltage level 13v.

clamping inrush

Test parameters

**i\_inrush\_lsout , i\_inrush\_pfout , i\_inrushOff\_lsout , i\_inrushOff\_pfout**

1) Set voltage level has 12v to VDDHV\_V and close HSOUT relay , set logic level 3.3v to hsout using fn\_seq

2) Open pfoutt relay set logic 0v to hsout

3) Force 1.5v to ls\_out and ps\_out and measure current ( **i\_inrushOff\_lsout i\_inrushOff\_pfout**)

4) Set logic high 3.3v to hsout

5) Force 1.5v to ls\_out and ps\_out and measure current( **i\_inrush\_lsout , i\_inrush\_pfout ,** )

6) Close relay of pfout and again set voltage level has 12v to VDDHV\_V

test multiplexer

Test parameters

**mux\_avss**

1. Force 13v to g\_mvipin and measure current
2. Select mux avss by using data (0x06)
3. Measure voltage at sdeol by forcing -50nA
4. And then restore mux by using data(0x02)

Resistance switch to ground

Test parameters

**sw2gnd\_sdeol , sw2gnd\_pfmon**

1. Set level has 0 in lsout,hsout and sdeol and close relay of sdeol
2. Open relays of pfmon and set levels has lsout,hsout=1 and sdeol=0
3. Force 0.1v to sdeol\_v and measure current(**sw2gnd\_sdeol**)
4. Force 0.1v to pfmon\_v and measure current(**sw2gnd\_pfmon**)
5. Bring back to the level lsout,hsout, sdeol =0.