## Table 5-2 Error code overview

Description		Layer 2	Monitored by	Error/ Prot	Error Buffer/ Blinking LED	Device	Defective Board
	Layer 1						
I <sup>2</sup> CM3 (SSB + SRF bus)	2	13	MIPS	E	BL / EB	SSB	SSB
I <sup>2</sup> CM2 (BE bus)	2	14	MIPS	E	BL / EB	SSB	SSB
I <sup>2</sup> CM1(FE bus)	2	18	MIPS	E	BL / EB	SSB	SSB
PNX (Fusion) doesn't boot	2	15	Stby µP	Р	BL	Fusion	SSB
12V	3	16	Stby µP	Р	BL	1	Supply
HDMI mux	2	23	MIPS	E	EB	SII9287	SSB
I2C switch	2	24	MIPS	E	EB	PCA9540	SSB
Channel dec DVB-T2	2	27	MIPS	E	EB	CXD2834	SSB
Channel dec DVB-S2	2	28	MIPS	E	EB	SI2169	SSB
Lnb controller	2	31	MIPS	E	EB	LNBH25	SSB
Hybrid Tuner	2	34	MIPS	E	EB	SUT-RE214Z	SSB
Main NVM	2	35	MIPS	E	EB	M24C64	SSB
Tuner DVB-S2	2	36	MIPS	E	EB	STV611X	SSB
Class-D	2	37	MIPS	E	EB	TAS 5731 PHP	SSB
µProcessor PQ	2	38	MIPS	E	EB	LPC1114	SSB
IO Expander	2	41	MIPS	E	EB	PCA9554	SSB
T° sensor SSB/set	2	42	MIPS	E	EB	LM75	T° sensor/SSB
Light sensor	6	43	MIPS	E	EB	TSL2571	Set
µP touch control	6	44	MIPS	E	EB	1	Set
RF4CE	6	46	MIPS	E	EB	1	Set
MIPS doesn't boot (SW cause)	2	53	Stby µP	Р	BL	FUSION	SSB
NT72314	9	61	MIPS	E	EB	NT72314/	QFHD
NT68361	9	62	MIPS	E	EB	NT68361/	QFHD
NT72314 not alive	9	63	MIPS	E	EB	NT72314/	QFHD
NT68361 not alive	9	64	MIPS	E	EB	NT68361/	QFHD

## Extra Info

- Rebooting. When a TV is constantly rebooting due to internal problems, most of the time no errors will be logged or blinked. This rebooting can be recognized via a ComPair interface and Hyperterminal (for Hyperterminal settings, see section <u>"5.8 Fault Finding and Repair Tips, 5.8.6</u> Logging). It's shown that the loggings which are generated by the main software keep continuing.
- Error 13 (I<sup>2</sup>C bus M3, SSB + SRF bus blocked). Current situation: when this error occurs, the TV can reboot due to the blocked bus. The best way for further diagnosis here, is to check the logging output.
- Error 14 (I<sup>2</sup>C bus M2, BE bus blocked). Current situation: when this error occurs. The best way for further diagnosis here, is to check the logging output.
- Error 18 (I<sup>2</sup>C bus M1, FE bus blocked). Current situation: when this error occurs. The best way for further diagnosis here, is to check the logging output.
- Error 15 (Fusion doesn't boot). Indicates that the main processor was not able to read his bootscript. This error will point to a hardware problem around the Fusion (supplies not OK, Fusion device completely dead, link between Mips and Standby Processor broken, etc...)
  Other root causes for this error can be due to hardware

problems regarding the DDR's and the bootscript reading from the Fusion device.

- Error 16 (12V). This voltage is made in the power supply and results in protection (LAYER 1 error = 3) in case of absence. When SDM (maintain grounding continuously) is activated we see blinking LED LAYER 2 error = 16.
- Error 17 (Display Supply). "Power OK" not applicable.
- Error 23 (HDMI mux). When there is no I<sup>2</sup>C communication towards the HDMI mux after start-up, LAYER 2 error = 23 will be logged and displayed via the blinking LED procedure if SDM is switched on.
- Error 24 (I2C switch). When there is no I<sup>2</sup>C communication towards the I<sup>2</sup>C switch, LAYER 2 error = 24 will be logged and displayed via the blinking LED procedure when SDM is switched on.
- Error 27 (Channel dec DVB-T2). When there is no I<sup>2</sup>C communication towards the DVB-T channel decoder, LAYER 2 error = 27 will be logged and displayed via the blinking LED procedure if SDM is switched on.
- Error 28 (Channel dec DVB-S2). When there is no I<sup>2</sup>C communication towards the DVB-S channel decoder,

LAYER 2 error = 28 will be logged and displayed via the blinking LED procedure if SDM is switched on.

- Error 31 (Lnb controller). When there is no I<sup>2</sup>C communication towards this device, LAYER 2 error = 31 will be logged and displayed via the blinking LED procedure if SDM is activated.
- Error 34 (Tuner). When there is no I<sup>2</sup>C communication towards the tuner during start-up, LAYER 2 error = 34 will be logged and displayed via the blinking LED procedure when SDM is switched on.
- Error 35 (main NVM). When there is no I<sup>2</sup>C communication towards the main NVM during start-up, LAYER 2 error = 35 will be displayed via the blinking LED procedure when SDM is switched "on". All service modes (CSM, SAM and SDM) are accessible during this failure, observed in the Uart logging as follows: "<< ERROR >>> PFPOW\_.C: First Error (id19, Layer\_1= 2 Layer\_= 35)".
- Error 36 (Tuner DVB-S). When there is no I<sup>2</sup>C communication towards the DVB-S tuner during start-up, LAYER 2 error = 36 will be logged and displayed via the blinking LED procedure when SDM is switched "on".
- Error 37 (Class-D). When there is no I<sup>2</sup>C communication towards the Class-D amplifier during start-up, LAYER 2 error = 37 will be logged and displayed via the blinking LED procedure when SDM is switched "on".
- Error 38 (microProcessor PQ). When there is no I<sup>2</sup>C communication towards this processor device during startup, LAYER 2 error = 38 will be logged and displayed via the blinking LED procedure when SDM is switched "on". This device supports the backlight + boost pwm control, scanning, 3D drive.
- Error 41 (I/O Expander). When there is no I<sup>2</sup>C communication towards this processor device during start-up, LAYER 2 error = 41 will be logged and displayed via the blinking LED procedure when SDM is switched "on".
- Error 42 (Temp sensor). Only applicable for TV sets equipped/stuffed with temperature devices.
- Error 43 (Light sensor). When there is no I<sup>2</sup>C communication towards the light sensor device during start-up, LAYER 2 error = 43 will be logged and displayed via the blinking LED procedure when SDM is switched "on".
- Error 44 (Touch control). When there is no I<sup>2</sup>C communication towards the touch control micro processor during start-up, LAYER 2 error = 44 will be logged and

