I960 Errors

Technical Support Bulletin

I960 error codes

Last Update 12-11-9

Abstract: The 80960 software has the following error codes. You can recognize the i960 machines by looking at the communication port. If your port looks like this you have an 80960 processor. And you can use this file.

If your communication port looks like this you have an mmc board processor and this file does not apply

Error description	Error code
no power	blank, all panel lights off, check pcb loose in socket, fuses on power entry module, wall plug has electricity.
no error	0
Incorrect flash Image	1
Joystick disabled	2
pause switch on	3
paper sensors must be on	4
sheet not loaded	5
media height sensor disabled	6
buffer too small or cutter_busy	7
no proessor	8.8.8.8 check pcbs loose in socket, 7 red leds on motherboard on, pcb dead
waiting for first vector to complete	9
too much ambient light	10
buffer overflow	12
graphics, escape, downloadable character, or polygon buffer too many parameters in escape command	13
invalid character in escape command	14
escape command not implemented	15
escape command parameter out of limits	16
no media covering media sensors	30

memtest during confidence test failed	31
reed switch sensor malfunction	32 – D024. Or pinch wheel under carriage too close to side plate. Move pinch wheel away from side plate. See options menu to disable the media height sensor.
pinch wheel improperly situated	35 – Move pinch wheel away from side plate.
bad front panel key received	36 – D031
bad calibration constants	37 – Must run diagnostic D008, then calibrate cutter.
pounce out of limits	39
hpgl compatible command parser error	40
rs232 parity error serial b (diagnostic only)	55
rs232 device overrun	56 – (broken cable, wrong handshake, broken serial hardware in computer/DFS)
rs232 framing error	57 – Plotter communications default for serial A port is 9600,n,8,1. set software to match these parameters.
rs232 parity error	58
eerom initialized to default settings	59
servo timeout	61 – Cutter software error or servo PCB failure - D10. Check earth ground. Prevent electrostatic discharge
servo motor over current	62 – Normally caused by paper jam.
voice coil over current	63
Relay opened no reason given	64
epo latch failure	65 – check seating of servo and CPU Board
timeout latch failure	66 – check seating of servo and CPU Board
voice coil current sensor failure	67 – check seating of servo and CPU Board
servo motor over current sensor failure	68 – check seating of servo and CPU Board
epo latch or epo reset failure	69 – check seating of servo and CPU Board
motor over current power amp failed	70 – power amp failed check seating of servo and CPU Board
voice coil over current power amp failed	71 – power amp failed check seating of servo and CPU Board
motor over current dac or analog failed	72 – DAC or analog failed. Check seating of servo and CPU Board.
x axis position counter failed	73 – check seating of servo and CPU Board (read/write patterns 0,ffff, aaaa, 5555)
y axis position counter failed	74 – check seating of servo and CPU Board (read/write patterns 0,ffff, aaaa, 5555)
x axis encoder failed	75 not used
y axis encoder failed	76 not used
x axis encoder detector failed	77 – check seating of servo and CPU Board (count simulation down 4, up 8 should = 4)

y axis encoder detector failed	78 – check seating of servo and CPU Board (count simulation down 4, up 8 should = 4)
initial move positioning error	79 – either carriage didn't move or reed switch failed. Try with media height sensor disabled
excessive position error x axis	80 – Reference motor position too far from actual motor position. This can be caused by speed or acceleration too high, jerking material from a heavy roll, media jam, bad calibration constants, power surge, servo motor / encoder failure, servo PCB failure, power amplifier pcb failure, relay on motherboard.
excessive position error y axis	81 – Reference motor position too far from actual motor position. This can be caused by speed or acceleration too high, jerking material from a heavy roll, media jam, bad calibration constants, power surge, servo motor / encoder failure, servo PCB failure, power amplifier pcb failure, relay on motherboard.
servo interface bus error	82 (0 in counter = 0xff)
unexpected arithmetic fault	83
unexpected constraint fault	84
unexpected interrupt	85
unexpected nmi interrupt	86
unexpected machine fault	87
unexpected operation fault	88
unexpected parallel interrupt	89
unexpected protection fault	90
unexpected real arithmetic fault	91
unexpected reserved fault	92
unexpected servo interrupt	93
unexpected trace fault	94
unexpected type fault	95
target missed origin	tar1
target missed skew	tar2
target missed scale	tar3
rotation of frame > than 1/2 target size	tar4

Boot a codes	Description
a01	first instruction
a02	after bss zero

a03	after initialize constants in ram
a04	after move interrupt table to ram
a05	fix prcb to point to interrupt table
a06	after 1/4 second delay using new table
a07	after ioinit
a08	after disable interrupts
a09	after fix stack
a10	in main after enable of timer interrupt
a11	after scan of keyboard
a12	after flash_init and flash vpp power off
a13	after flash checksum
a14	running dram diagnostic
a15	dram diagnostic failed
a16	running flash diagnostic
a17	flash memory does not contain expected program
a18	running eprom diagnostic
a19	eprom does not contain expected program
a20	testing serial ports
a21	serial port diagnostic failed
a22	after open console
a23	after diagnostics
a24	diagnostics complete (no display)
a25	nmi_int
a26	servo_int
a27	parallel_int
a28	user_reserved
a29	user_trace
a30	user_operation
a31	user_arithmetic
a32	user_real_arithmetic
a33	user_constraint
a34	user_protection
a35	user_machine
a36	user_type
a37	checksum failed on flash memory. Waiting for hex file.
a38	User requested program loader with key press during power up
a50	starting receive of hex file at 38400 baud
a51	starting receive of hex file at 19200 baud
a61	expected soh. Not received during flash program load
a62	flash record received out of sequence
a63	check sum error in flash record