

```

1  =====
2      MT7621   stage1 code 13:15:05 (ASIC)
3      CPU=50000000 HZ BUS=16666666 HZ
4  =====
5  Change MPLL source from XTAL to CR...
6  do MEMPLL setting..
7  MEMPLL Config : 0x11100000
8  3PLL mode + External loopback
9  === XTAL-40Mhz === DDR-1200Mhz ===
10 PLL2 FB_DL: 0x5, 1/0 = 589/435 15000000
11 PLL3 FB_DL: 0xc, 1/0 = 699/325 31000000
12 PLL4 FB_DL: 0x1a, 1/0 = 586/438 69000000
13 do DDR setting..[00320381]
14 Apply DDR3 Setting...(use customer AC)
15      0      8      16      24      32      40      48      56      64      72      80      88      96      104      112      120
16  -----
17 0000:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
18 0001:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
19 0002:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
20 0003:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
21 0004:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
22 0005:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
23 0006:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
24 0007:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
25 0008:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
26 0009:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
27 000A:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
28 000B:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
29 000C:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
30 000D:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
31 000E:| 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1
32 000F:| 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 0
33 0010:| 1 1 1 1 1 1 1 1 1 1 0 0 0 0 0 0
34 0011:| 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0
35 0012:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
36 0013:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
37 0014:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
38 0015:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
39 0016:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
40 0017:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
41 0018:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
42 0019:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
43 001A:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
44 001B:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
45 001C:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
46 001D:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
47 001E:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
48 001F:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
49 rank 0 coarse = 15
50 rank 0 fine = 72
51 B:| 0 0 0 0 0 0 0 0 0 0 1 1 1 0 0 0
52 opt_dle value:11
53 DRAMC_R0DELDELTY[018]=00001D1F
54 =====
55 RX      DQS perbit delay software calibration
56 =====
57 1.0-15 bit dq delay value
58 =====
59 bit| 0 1 2 3 4 5 6 7 8 9
60 -----
61 0 | 15 11 15 13 15 11 15 8 4 11
62 10 | 7 14 7 12 5 12
63 -----
64
65 =====
66 2.dqs window
67 x=pass dqs delay value (min~max)center
68 y=0-7bit DQ of every group
69 input delay:DQS0 =31 DQS1 = 29

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70  =====
71  bit      DQS0      bit      DQS1
72  0  (0~59)29  8  (1~55)28
73  1  (1~59)30  9  (1~56)28
74  2  (0~59)29  10 (1~57)29
75  3  (1~58)29  11 (1~52)26
76  4  (0~57)28  12 (1~54)27
77  5  (1~61)31  13 (0~56)28
78  6  (0~59)29  14 (1~55)28
79  7  (1~62)31  15 (0~56)28
80  =====
81  3.dq delay value last
82  =====
83  bit|      0  1  2  3  4  5  6  7  8  9
84  -----
85  0 |      15 12 15 15 15 11 15 8 5 12
86  10 |      7 15 9 13 6 13
87  =====
88  =====
89  TX perbyte calibration
90  =====
91  DQS loop = 15, cmp_err_1 = ffff2a01
92  DQS loop = 14, cmp_err_1 = ffff0000
93  dqs_perbyte_dly.last_dqsdly_pass[0]=14, finish count=1
94  dqs_perbyte_dly.last_dqsdly_pass[1]=14, finish count=2
95  DQ loop=15, cmp_err_1 = ffff01aa
96  DQ loop=14, cmp_err_1 = ffff0082
97  dqs_perbyte_dly.last_dqdly_pass[1]=14, finish count=1
98  DQ loop=13, cmp_err_1 = ffff0080
99  DQ loop=12, cmp_err_1 = ffff0000
100 dqs_perbyte_dly.last_dqdly_pass[0]=12, finish count=2
101 byte:0, (DQS,DQ)=(9,8)
102 byte:1, (DQS,DQ)=(8,8)
103 20,data:89
104 [EMI] DRAMC calibration passed
105
106 =====
107 MT7621 stage1 code done
108 CPU=50000000 HZ BUS=16666666 HZ
109 =====
110
111
112 U-Boot 1.1.3 (Sep 25 2015 - 10:29:47)
113
114 Board: Ralink APSoC DRAM: 128 MB
115 relocate_code Pointer at: 87fac000
116
117 Config XHCI 40M PLL
118 Allocate 16 byte aligned buffer: 87felbb0
119 Enable NFI Clock
120 # MTK NAND # : Use HW ECC
121 NAND ID [C2 F1 80 1D C2]
122 Device found in MTK table, ID: c2f1, EXT_ID: 801dc2
123 Support this Device in MTK table! c2f1
124 select_chip
125 [NAND]select ecc bit:4, sparesize :64 spare_per_sector=16
126 Signature matched and data read!
127 load_fact_bbt success 1023
128 load_fact_bbt success
129 [mtk_nand] probe successfully!
130 mtd->writesize=2048 mtd->oobsize=64, mtd->erasesize=131072 devinfo.iowidth=8
131 Env addr : 0x100000
132 .*** Warning - bad CRC, using default environment
133
134 =====
135 Ralink UBoot Version: 4.2.1.0
136 -----
137 ASIC MT7621AS (MAC to MT7530 Mode)
138 DRAM_CONF_FROM: Auto-Detection

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```
139 DRAM_TYPE: DDR3
140 DRAM bus: 16 bit
141 Xtal Mode=3 OCP Ratio=1/3
142 Flash component: NAND Flash
143 Date:Sep 25 2015 Time:10:29:47
144 =====
145 icache: sets:256, ways:4, linesz:32 ,total:32768
146 dcache: sets:256, ways:4, linesz:32 ,total:32768
147
148 ##### The CPU freq = 880 MHZ #####
149 estimate memory size =128 Mbytes
150
151 Reset switch ...
152 #Reset_MT7530
153 set LAN/WAN LLLLW
154 ..Example expects ABI version 2
155 Actual U-Boot ABI version 2
156
157 *****
158 Uboot StandAlone Entry
159 *****
160 0, cmd
161 1, 0x0000000D
162 cmd : 0x0000000D
163
164
165 Press Ctrl+C to Enter the Main loop...
166 Example expects ABI version 2
167 Actual U-Boot ABI version 2
168
169 *****
170 Uboot StandAlone Entry
171 *****
172 0, cmd
173 1, 0x0000000F
174 cmd : 0x0000000F
175 Enter NMRP_main
176 Flash Sector Number : 1024.
177
178 NetTxPacket = 0x87FE5B40
179
180 KSEG1ADDR(NetTxPacket) = 0xA7FE5B40
181
182 NetLoop,call eth_halt !
183
184 NetLoop,call eth_init !
185 Trying Eth0 (10/100-M)
186
187 Waitting for RX_DMA_BUSY status Start... done
188
189
190 ETH_STATE_ACTIVE!!
191 NMRP_FLASH_SIZE_buffer --> a1000000.
192 NMRP:LISTENING
193 ### No NMRP Server found ###
194
195 KSEG1ADDR(NetTxPacket) = 0xA7FE5B40
196
197 NetLoop,call eth_halt !
198
199 NetLoop,call eth_init !
200 Trying Eth0 (10/100-M)
201
202 ETH_STATE_ACTIVE!!
203 STANDALONE_LOAD_ADDR is 0xa0600000
204 Example expects ABI version 2
205 Actual U-Boot ABI version 2
206
207 *****
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```
208     Uboot StandAlone Entry
209 *****
210 0, boot
211 Flash Sector Number : 1024.
212
213 *****
214     Sercomm Boot Version 1.19.0
215
216 *****
217 Upgrade flag check pass!Entering Firmware : Everything is OK.
218 kernel addr :0xbfe00000
219
220 System Boot system code via Flash.
221 ## Booting image at bfe00000 ...
222     Image Name:   MIPS OpenWrt Linux-4.14.221
223     Image Type:   MIPS Linux Kernel Image (lzma compressed)
224     Data Size:    1877378 Bytes =  1.8 MB
225     Load Address: 80001000
226     Entry Point:  80001000
227     .....      Verifying Checksum ... OK
228     Uncompressing Kernel Image ... OK
229
230
231
232 commandline in boot is : <NULL> !!!!
233
234
235
236 No initrd
237 ## Transferring control to Linux (at address 80001000) ...
238 ## Giving linux memsize in MB, 128
239
240 Starting kernel ...
241
242 [ 0.000000] Linux version 4.14.221 (builder@buildhost) (gcc version 7.5.0 (OpenWrt
GCC 7.5.0 r11306-c4a6851c72)) #0 SMP Mon Feb 15 15:22:37 2021
243 [ 0.000000] SoC Type: MediaTek MT7621 ver:1 eco:3
244 [ 0.000000] bootconsole [early0] enabled
245 [ 0.000000] CPU0 revision is: 0001992f (MIPS 1004Kc)
246 [ 0.000000] MIPS: machine is Netgear R6220
247 [ 0.000000] Determined physical RAM map:
248 [ 0.000000]   memory: 08000000 @ 00000000 (usable)
249 [ 0.000000] Initrd not found or empty - disabling initrd
250 [ 0.000000] VPE topology {2} total 2
251 [ 0.000000] Primary instruction cache 32kB, VIPT, 4-way, linesize 32 bytes.
252 [ 0.000000] Primary data cache 32kB, 4-way, PIPT, no aliases, linesize 32 bytes
253 [ 0.000000] MIPS secondary cache 256kB, 8-way, linesize 32 bytes.
254 [ 0.000000] Zone ranges:
255 [ 0.000000]   Normal   [mem 0x0000000000000000-0x0000000007ffffff]
256 [ 0.000000]   HighMem  empty
257 [ 0.000000] Movable zone start for each node
258 [ 0.000000] Early memory node ranges
259 [ 0.000000]   node    0: [mem 0x0000000000000000-0x0000000007ffffff]
260 [ 0.000000] Initmem setup node 0 [mem 0x0000000000000000-0x0000000007ffffff]
261 [ 0.000000] random: get_random_bytes called from 0x80577744 with crng_init=0
262 [ 0.000000] percpu: Embedded 14 pages/cpu s26224 r8192 d22928 u57344
263 [ 0.000000] Built 1 zonelists, mobility grouping on. Total pages: 32512
264 [ 0.000000] Kernel command line: console=ttyS0,57600 rootfstype=squashfs,jffs2
265 [ 0.000000] PID hash table entries: 512 (order: -1, 2048 bytes)
266 [ 0.000000] Dentry cache hash table entries: 16384 (order: 4, 65536 bytes)
267 [ 0.000000] Inode-cache hash table entries: 8192 (order: 3, 32768 bytes)
268 [ 0.000000] Writing ErrCtl register=00015022
269 [ 0.000000] Readback ErrCtl register=00015022
270 [ 0.000000] Memory: 122620K/131072K available (4756K kernel code, 239K rwdData, 588K
rodData, 1252K init, 255K bss, 8452K reserved, 0K cma-reserved, 0K highmem)
271 [ 0.000000] SLUB: HWalign=32, Order=0-3, MinObjects=0, CPUs=2, Nodes=1
272 [ 0.000000] Hierarchical RCU implementation.
273 [ 0.000000] RCU restricting CPUs from NR_CPUS=4 to nr_cpu_ids=2.
274 [ 0.000000] RCU: Adjusting geometry for rcu_fanout_leaf=16, nr_cpu_ids=2
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275 [ 0.000000] NR_IRQS: 256
276 [ 0.000000] CPU Clock: 880MHz
277 [ 0.000000] clocksource: GIC: mask: 0xffffffffffffffff max_cycles: 0xcac478abb4,
max_idle_ns: 440795247997 ns
278 [ 0.000000] clocksource: MIPS: mask: 0xffffffff max_cycles: 0xffffffff, max_idle_ns:
4343773742 ns
279 [ 0.000009] sched_clock: 32 bits at 440MHz, resolution 2ns, wraps every 4880645118ns
280 [ 0.015496] Calibrating delay loop... 586.13 BogoMIPS (lpj=2930688)
281 [ 0.087795] pid_max: default: 32768 minimum: 301
282 [ 0.097089] Mount-cache hash table entries: 1024 (order: 0, 4096 bytes)
283 [ 0.110106] Mountpoint-cache hash table entries: 1024 (order: 0, 4096 bytes)
284 [ 0.125640] Hierarchical SRCU implementation.
285 [ 0.134901] smp: Bringing up secondary CPUs ...
286 [ 0.157407] Primary instruction cache 32kB, VIPT, 4-way, linesize 32 bytes.
287 [ 0.157416] Primary data cache 32kB, 4-way, PIPT, no aliases, linesize 32 bytes
288 [ 0.157426] MIPS secondary cache 256kB, 8-way, linesize 32 bytes.
289 [ 0.157554] CPU1 revision is: 0001992f (MIPS 1004Kc)
290 [ 0.204374] Synchronize counters for CPU 1: done.
291 [ 0.264031] smp: Brought up 1 node, 2 CPUs
292 [ 0.275661] clocksource: jiffies: mask: 0xffffffff max_cycles: 0xffffffff,
max_idle_ns: 19112604462750000 ns
293 [ 0.295134] futex hash table entries: 512 (order: 2, 16384 bytes)
294 [ 0.307338] pinctrl core: initialized pinctrl subsystem
295 [ 0.319068] NET: Registered protocol family 16
296 [ 0.335326] pull PCIe RST: RALINK_RSTCTRL = 0
297 [ 0.644256] release PCIe RST: RALINK_RSTCTRL = 7000000
298 [ 0.654330] ***** Xtal 40MHz *****
299 [ 0.661052] release PCIe RST: RALINK_RSTCTRL = 7000000
300 [ 0.671259] Port 0 N_FTS = 1b102800
301 [ 0.678154] Port 1 N_FTS = 1b102800
302 [ 0.685079] Port 2 N_FTS = 1b102800
303 [ 1.843508] PCIE1 no card, disable it (RST&CLK)
304 [ 1.852200] -> 12007f2
305 [ 1.857017] PCIE0 enabled
306 [ 1.862214] PCIE2 enabled
307 [ 1.867395] PCI host bridge /pcie@1e140000 ranges:
308 [ 1.876924] MEM 0x0000000060000000..0x000000006fffffff
309 [ 1.887277] IO 0x000000001e160000..0x000000001e16ffff
310 [ 1.897650] PCI coherence region base: 0xbfbf8000, mask/settings: 0x60000000
311 [ 1.923427] mt7621_gpio 1e000600.gpio: registering 32 gpios
312 [ 1.934778] mt7621_gpio 1e000600.gpio: registering 32 gpios
313 [ 1.946023] mt7621_gpio 1e000600.gpio: registering 32 gpios
314 [ 1.959002] PCI host bridge to bus 0000:00
315 [ 1.967088] pci_bus 0000:00: root bus resource [mem 0x60000000-0x6fffffff]
316 [ 1.980685] pci_bus 0000:00: root bus resource [io 0xffffffff]
317 [ 1.992425] pci_bus 0000:00: root bus resource [??? 0x00000000 flags 0x0]
318 [ 2.005901] pci_bus 0000:00: No busn resource found for root bus, will use [bus 00-ff]
319 [ 2.022484] pci 0000:00:00.0: bridge configuration invalid ([bus 00-00]),
reconfiguring
320 [ 2.038286] pci 0000:00:01.0: bridge configuration invalid ([bus 00-00]),
reconfiguring
321 [ 2.055564] pci 0000:00:00.0: BAR 0: no space for [mem size 0x80000000]
322 [ 2.068618] pci 0000:00:00.0: BAR 0: failed to assign [mem size 0x80000000]
323 [ 2.082419] pci 0000:00:01.0: BAR 0: no space for [mem size 0x80000000]
324 [ 2.095540] pci 0000:00:01.0: BAR 0: failed to assign [mem size 0x80000000]
325 [ 2.109370] pci 0000:00:00.0: BAR 8: assigned [mem 0x60000000-0x600fffff]
326 [ 2.122854] pci 0000:00:00.0: BAR 9: assigned [mem 0x60100000-0x601fffff pref]
327 [ 2.137188] pci 0000:00:01.0: BAR 8: assigned [mem 0x60200000-0x602fffff]
328 [ 2.150666] pci 0000:00:00.0: BAR 1: assigned [mem 0x60300000-0x6030ffff]
329 [ 2.164154] pci 0000:00:01.0: BAR 1: assigned [mem 0x60310000-0x6031ffff]
330 [ 2.177641] pci 0000:01:00.0: BAR 0: assigned [mem 0x60000000-0x600fffff 64bit]
331 [ 2.192156] pci 0000:01:00.0: BAR 6: assigned [mem 0x60100000-0x6010ffff pref]
332 [ 2.206480] pci 0000:00:00.0: PCI bridge to [bus 01]
333 [ 2.216312] pci 0000:00:00.0: bridge window [mem 0x60000000-0x600fffff]
334 [ 2.229826] pci 0000:00:00.0: bridge window [mem 0x60100000-0x601fffff pref]
335 [ 2.244161] pci 0000:02:00.0: BAR 0: assigned [mem 0x60200000-0x602fffff]
336 [ 2.257632] pci 0000:00:01.0: PCI bridge to [bus 02]
337 [ 2.267465] pci 0000:00:01.0: bridge window [mem 0x60200000-0x602fffff]
338 [ 2.282316] clocksource: Switched to clocksource GIC
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339 [ 2.293636] NET: Registered protocol family 2
340 [ 2.303132] TCP established hash table entries: 1024 (order: 0, 4096 bytes)
341 [ 2.316886] TCP bind hash table entries: 1024 (order: 1, 8192 bytes)
342 [ 2.329484] TCP: Hash tables configured (established 1024 bind 1024)
343 [ 2.342203] UDP hash table entries: 256 (order: 1, 8192 bytes)
344 [ 2.353716] UDP-Lite hash table entries: 256 (order: 1, 8192 bytes)
345 [ 2.366340] NET: Registered protocol family 1
346 [ 2.612258] 4 CPUs re-calibrate udelay(lpj = 2924544)
347 [ 2.623283] Crashlog allocated RAM at address 0x3f00000
348 [ 2.633902] workingset: timestamp_bits=30 max_order=15 bucket_order=0
349 [ 2.654801] squashfs: version 4.0 (2009/01/31) Phillip Lougher
350 [ 2.666333] jffs2: version 2.2 (NAND) (SUMMARY) (LZMA) (RTIME) (CMODE_PRIORITY) (c)
2001-2006 Red Hat, Inc.
351 [ 2.689609] io scheduler noop registered
352 [ 2.697484] io scheduler deadline registered (default)
353 [ 2.709099] Serial: 8250/16550 driver, 16 ports, IRQ sharing enabled
354 [ 2.725797] console [ttyS0] disabled
355 [ 2.732860] 1e000c00.uartlite: ttyS0 at MMIO 0x1e000c00 (irq = 15, base_baud =
3125000) is a 16550A
356 [ 2.750789] console [ttyS0] enabled
357 [ 2.750789] console [ttyS0] enabled
358 [ 2.764580] bootconsole [early0] disabled
359 [ 2.764580] bootconsole [early0] disabled
360 [ 2.782593] MediaTek Nand driver init, version v2.1 Fix AHB virt2phys error
361 [ 2.796619] Enable NFI Clock
362 [ 2.802362] # MTK NAND # : Use HW ECC
363 [ 2.809656] Device found in MTK table, ID: c2f1, EXT_ID: 801dc2
364 [ 2.821443] Support this Device in MTK table! c2f1
365 [ 2.831336] [NAND]select ecc bit:4, sparesize :64 spare_per_sector=16
366 [ 2.844212] nand: device found, Manufacturer ID: 0xc2, Chip ID: 0xf1
367 [ 2.856864] nand: Macronix NAND 128MiB 3,3V 8-bit
368 [ 2.866229] nand: 128 MiB, SLC, erase size: 128 KiB, page size: 2048, OOB size: 64
369 [ 2.881317] Scanning device for bad blocks
370 [ 3.160969] 6 fixed-partitions partitions found on MTD device MT7621-NAND
371 [ 3.174496] Creating 6 MTD partitions on "MT7621-NAND":
372 [ 3.184915] 0x000000000000-0x000000100000 : "u-boot"
373 [ 3.195921] 0x000000100000-0x000000200000 : "SC PID"
374 [ 3.206894] 0x000000200000-0x000000600000 : "kernel"
375 [ 3.217856] 0x000000600000-0x000002200000 : "ubi"
376 [ 3.228496] 0x000002e00000-0x000002f00000 : "factory"
377 [ 3.239620] 0x000004200000-0x000007e00000 : "reserved"
378 [ 3.251365] [mtk_nand] probe successfully!
379 [ 3.260267] Signature matched and data read!
380 [ 3.268774] load_fact_bbt success 1023
381 [ 3.277011] libphy: Fixed MDIO Bus: probed
382 [ 3.354867] libphy: mdio: probed
383 [ 4.760934] mtk_soc_eth 1e100000.ethernet: loaded mt7530 driver
384 [ 4.773468] mtk_soc_eth 1e100000.ethernet eth0: mediatek frame engine at 0xbe100000,
irq 17
385 [ 4.793107] NET: Registered protocol family 10
386 [ 4.803601] Segment Routing with IPv6
387 [ 4.810977] NET: Registered protocol family 17
388 [ 4.819966] bridge: filtering via arp/ip/ip6tables is no longer available by
default. Update your scripts to load br_netfilter if you need this.
389 [ 4.845764] 8021q: 802.1Q VLAN Support v1.8
390 [ 4.857285] UBI: auto-attach mtd3
391 [ 4.863956] ubi0: attaching mtd3
392 [ 5.127525] ubi0: scanning is finished
393 [ 5.150012] ubi0: attached mtd3 (name "ubi", size 28 MiB)
394 [ 5.160783] ubi0: PEB size: 131072 bytes (128 KiB), LEB size: 126976 bytes
395 [ 5.174477] ubi0: min./max. I/O unit sizes: 2048/2048, sub-page size 2048
396 [ 5.187984] ubi0: VID header offset: 2048 (aligned 2048), data offset: 4096
397 [ 5.201840] ubi0: good PEBs: 224, bad PEBs: 0, corrupted PEBs: 0
398 [ 5.213801] ubi0: user volume: 2, internal volumes: 1, max. volumes count: 128
399 [ 5.228175] ubi0: max/mean erase counter: 14/6, WL threshold: 4096, image sequence
number: 336613720
400 [ 5.246352] ubi0: available PEBs: 0, total reserved PEBs: 224, PEBs reserved for bad
PEB handling: 20
401 [ 5.264732] ubi0: background thread "ubi_bgt0d" started, PID 363
```

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402 [ 5.266550] block ubiblock0_0: created from ubi0:0(rootfs)
403 [ 5.287648] ubiblock: device ubiblock0_0 (rootfs) set to be root filesystem
404 [ 5.301520] hctosys: unable to open rtc device (rtc0)
405 [ 5.311826] usb_vbus: disabling
406 [ 5.321742] squashfs: SQUASHFS error: unable to read inode lookup table
407 [ 5.335419] List of all partitions:
408 [ 5.342391] 1f00          1024 mtdblock0
409 [ 5.342398] (driver?)
410 [ 5.355399] 1f01          1024 mtdblock1
411 [ 5.355404] (driver?)
412 [ 5.368411] 1f02          4096 mtdblock2
413 [ 5.368417] (driver?)
414 [ 5.381417] 1f03         28672 mtdblock3
415 [ 5.381421] (driver?)
416 [ 5.394444] 1f04          1024 mtdblock4
417 [ 5.394449] (driver?)
418 [ 5.407457] 1f05         61440 mtdblock5
419 [ 5.407463] (driver?)
420 [ 5.420462] fe00           2604 ubiblock0_0
421 [ 5.420466] (driver?)
422 [ 5.433828] No filesystem could mount root, tried:
423 [ 5.433834] squashfs
424 [ 5.443550] jffs2
425 [ 5.448055]
426 [ 5.455005] Kernel panic - not syncing: VFS: Unable to mount root fs on
unknown-block(254,0)
427 [ 5.473659] Rebooting in 1 seconds..

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```

428
429 =====
430             MT7621   stage1 code 13:15:05 (ASIC)
431             CPU=50000000 HZ BUS=16666666 HZ
432 =====
433 Change MPLL source from XTAL to CR...
434 do MEMPLL setting..
435 MEMPLL Config : 0x11100000
436 3PLL mode + External loopback
437 === XTAL-40Mhz === DDR-1200Mhz ===
438 PLL2 FB_DL: 0x5, 1/0 = 646/378 15000000
439 PLL3 FB_DL: 0xc, 1/0 = 708/316 31000000
440 PLL4 FB_DL: 0x1a, 1/0 = 740/284 69000000
441 do DDR setting..[00320381]
442 Apply DDR3 Setting...(use customer AC)
443           0      8      16      24      32      40      48      56      64      72      80      88      96      104      112      120
444 -----
445 0000:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
446 0001:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
447 0002:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
448 0003:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
449 0004:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
450 0005:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
451 0006:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
452 0007:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
453 0008:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
454 0009:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
455 000A:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
456 000B:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
457 000C:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
458 000D:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1
459 000E:| 0 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1
460 000F:| 0 0 0 0 1 1 1 1 1 1 1 1 1 1 0 0
461 0010:| 1 1 1 1 1 1 1 1 1 1 0 0 0 0 0 0
462 0011:| 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0
463 0012:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
464 0013:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
465 0014:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
466 0015:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
467 0016:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
468 0017:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
469 0018:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

```

```

470 0019:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
471 001A:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
472 001B:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
473 001C:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
474 001D:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
475 001E:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
476 001F:| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
477 rank 0 coarse = 15
478 rank 0 fine = 72
479 B:| 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 0 0 0
480 opt_dle value:11
481 DRAMC_R0DELDLY[018]=00001C20
482 =====
483 RX DQS perbit delay software calibration
484 =====
485 1.0-15 bit dq delay value
486 =====
487 bit| 0 1 2 3 4 5 6 7 8 9
488 -----
489 0 | 15 11 15 13 15 11 15 9 4 11
490 10 | 7 14 7 13 5 12
491 -----
492
493 =====
494 2.dqs window
495 x=pass dqs delay value (min~max)center
496 y=0-7bit DQ of every group
497 input delay:DQS0 =32 DQS1 = 28
498 =====
499 bit DQS0 bit DQS1
500 0 (0~58)29 8 (1~54)27
501 1 (1~58)29 9 (1~56)28
502 2 (0~59)29 10 (1~56)28
503 3 (1~57)29 11 (1~52)26
504 4 (0~56)28 12 (1~55)28
505 5 (1~60)30 13 (1~56)28
506 6 (0~58)29 14 (1~55)28
507 7 (2~63)32 15 (1~55)28
508 =====
509 3.dq delay value last
510 =====
511 bit| 0 1 2 3 4 5 6 7 8 9
512 -----
513 0 | 15 14 15 15 15 13 15 9 5 11
514 10 | 7 15 7 13 5 12
515 =====
516 =====
517 TX perbyte calibration
518 =====
519 DQS loop = 15, cmp_err_1 = ffff2a01
520 DQS loop = 14, cmp_err_1 = ffff0000
521 dqs_perbyte_dly.last_dqsdly_pass[0]=14, finish count=1
522 dqs_perbyte_dly.last_dqsdly_pass[1]=14, finish count=2
523 DQ loop=15, cmp_err_1 = ffff01aa
524 DQ loop=14, cmp_err_1 = ffff0082
525 dqs_perbyte_dly.last_dqdly_pass[1]=14, finish count=1
526 DQ loop=13, cmp_err_1 = ffff0080
527 DQ loop=12, cmp_err_1 = ffff0000
528 dqs_perbyte_dly.last_dqdly_pass[0]=12, finish count=2
529 byte:0, (DQS,DQ)=(9,8)
530 byte:1, (DQS,DQ)=(8,8)
531 20,data:89
532 [EMI] DRAMC calibration passed
533
534 =====
535 MT7621 stagel code done
536 CPU=50000000 HZ BUS=16666666 HZ
537 =====
538

```