

Description of Memory (On Reset)	Physical Address
<u>UART Bootloader Entry Point</u>	0x00000000
<u>Core 1 Entry Point</u> When read != 0, "mov w30,w0", where w0 = 0x00000504	0x00000504
<u>Core 2 Entry Point</u> When read != 0, "mov w30,w0", where w0 = 0x00000508	0x00000508
<u>Core 3 Entry Point</u> When read != 0, "mov w30,w0", where w0 = 0x0000050C	0x0000050C
<u>Interrupt Vector Handlers</u> Undefined Handler SWI Handler Prefetch Handler Data Handler Unused Handler IRQ Handler FIQ Handler *Note only 256 bytes is allocated for each handler. They should be short because they interrupt normal program flow. If more space is needed then use a branch with link somewhere else in memory.	0x00000800 0x00000800 0x00000900 0x00000A00 0x00000B00 0x00000C00 0x00000D00 0x00000E00
<u>User Code Entry Point</u> Gets filled with user code by bootloader. When bootloader finishes receiving data, branch to this address which contains _start: for user code.	0x00001000
<u>Stack Pointers</u> Core 0 Stack Pointer Core 1 Stack Pointer Core 2 Stack Pointer Core 3 Stack Pointer *Note the stack pointer progresses downwards in memory. It subtracts first, then writes. 4096 bytes of RAM is dedicated for each core's "stack".	0x3F000000 0x3F000000 0x3EFFF000 0x3EFFE000 0x3FFFD000
<u>Peripheral Address Base</u>	0x3F000000

Description of Memory (On MMU Enable)	Physical Address
<u>MMU Translation Table</u> Filled with 1024 entries of 1MB sections representing all of the physical memory.	0x00000000
<u>End Of Translation Table</u> Contents: 0x00000000 *Since bits[1:0] != 0b10, MMU knows it's end of table	0x00000400
<u>Core 1 Entry Point</u> When read != 0, "mov w30,w0", where w0 = 0x00000504	0x00000504
<u>Core 2 Entry Point</u> When read != 0, "mov w30,w0", where w0 = 0x00000508	0x00000508
<u>Core 3 Entry Point</u> When read != 0, "mov w30,w0", where w0 = 0x0000050C	0x0000050C
<u>Interrupt Vector Handlers</u> Undefined Handler SWI Handler Prefetch Handler Data Handler Unused Handler IRQ Handler FIQ Handler *Note only 256 bytes is allocated for each handler. They should be short because they interrupt normal program flow. If more space is needed then use a branch with link somewhere else in memory.	0x00000800 0x00000800 0x00000900 0x00000A00 0x00000B00 0x00000C00 0x00000D00 0x00000E00
<u>User Code Entry Point</u> Contains _start: for the user code. Since user code is already running when MMU is enabled, it will overwrite bootloader to save some space.	0x00001000
<u>Stack Pointers</u> Core 0 Stack Pointer Core 1 Stack Pointer Core 2 Stack Pointer Core 3 Stack Pointer *Note the stack pointer progresses downwards in memory. It subtracts first, then writes. 4096 bytes of RAM is dedicated for each core's "stack".	0x3F000000 0x3F000000 0x3EFFF000 0x3EFFE000 0x3FFFD000
<u>Peripheral Address Base</u>	0x3F000000