

deep: Memory Map for NTB MPC555 Headerboard

General Memory Map:

0x0000'0000	Internal Flash A	Dual-mapped: 0x0000'0000 0x0000'7FFF	256 KiB
0x0003'FFFF			
0x0004'0000	Internal Flash B		192 KiB
0x0006'FFFF			
0x0030'0000	Dual Port TPU RAM		6 KiB
0x0030'0200			
0x003F'9800	Internal RAM A		10 KiB
0x003F'BFFF			
0x003F'C000	Internal RAM B		16 KiB
0x003F'FFFF			
0x0080'0000	External RAM	0x0080'0000 0x0080'7FFF	2 MiB
0x09F'FFFF			
0x0100'0000	External Flash	0x0100'0000 0x0100'7FFF	4 MiB
0x013F'FFFF			

Details to dual-mapped memory section:

0x0000'0000	Reserved
0x0000'0100	System reset, NMI interrupt
0x0000'0200	Machine check
0x0000'0300	Reserved
0x0000'0400	Reserved
0x0000'0500	External Interrupt
0x0000'0600	Alignment
0x0000'0700	Program
0x0000'0800	Floating-point unavailable
0x0000'0900	Decrementer
0x0000'0A00	Reserved
0x0000'0B00	Reserved
0x0000'0C00	System call
0x0000'0D00	Trace
0x0000'0E00	Floating-point assist
0x0000'1000	Implementation-dependent software emulation
0x0000'1100	Reserved
0x0000'1200	Reserved
0x0000'1300	Implementation-dependent instruction protection error
0x0000'1400	Implementation-dependent data protection error
0x0000'1500	Reserved
⋮	
0x0000'1BFF	Reserved
0x0000'1C00	Implementation-dependent data breakpoint
0x0000'1D00	Implementation-dependent instruction breakpoint
0x0000'1E00	Implementation-dependent maskable external breakp.
0x0000'1F00	Implementation-dependent non-maskable ext. breakp.
0x0000'2000	System table
⋮	
0x0000'7xxx	
⋮	
0x0000'7FFF	

Exception code

System table

Details to external flash:

0x0100'0000 ... 0x0100'7FFF	BS_0	32 KiB
0x0100'8000 ... 0x0100'BFFF	BS_1	16 KiB
0x0100'C000 ... 0x0100'FFFF	BS_2	16 KiB
0x0101'0000 ... 0x0101'FFFF	BS_3	64 KiB
0x0102'0000 ... 0x0103'FFFF	DS_0	128 KiB
0x0104'0000 ... 0x0105'FFFF	DS_1	128 KiB
0x0106'0000 ... 0x0107'FFFF	DS_2	128 KiB
⋮	⋮	⋮
0x010E'0000 ... 0x010F'FFFF	DS_29	128 KiB
0x0110'0000 ... 0x0111'FFFF	DS_30	128 KiB

Please note:

- Drawing not to scale
- Units use binary prefixes:
1 KiB = 1024 Byte
1 MiB = 1024 KiB = 1'048'576 Byte

Boot from RAM

Boot from Flash