|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **PROGRAMA 1** | | | | |
| **ETIQUETA** | **DIRECCIÓN** | **INSTRUCCIÓN** | **ASSEMBLY** | **COMENTARIOS** |
| **Reset** | **@0x0** | **10210003** | **beq R1, R1, INI;** | Se salta siempre a la @16 donde empieza el programa |
| IRQ | @0x4 | 1021003E | beq R1, R1, RTI; | Se salta siempre a la @64\*4 |
| DAbort | @0x8 | 1021005D | beq R1, R1, RT\_Abort; | Se salta siempre a la @96\*4 |
| INI | **@0x10** | **08010000** | LW R1, 0(R0) | R1=Mem(0) = 1; |
|  | **14** | **08020004** | Lw r2, 4(R0) | **R2 = MEM(4) = 5** |
|  | **18** | **08030008** | **Lw r3, 8(r0)** | **R3= mem(8)= 4** |
|  | **1c** | **080401F0** | **Lw r4, 500(r0)** | **R4 = mem( c )= base V1** |
|  | **20** | **080501F4** | **Lw r5, 504( r0 )** | **R5= mem(20) = base v2** |
|  | **24** | **080601F8** | **LW r6, 508 (r0)** | **R6 = mem (34) = base de v3** |
|  | **28** | **080701FC** | **Lw r7, 512(r0)** | **R7 = mem(48) = base v4** |
|  | **2c** | **0808005c** | **Lw r8 , 54(r0)** | **R8 = mem(4c) = dirscrach(ADDR31-19 X”100000”)**  **(falta ver la palabra de la scratch)** |
|  | **30** | **080A0060** | **Lw r10, 60(r0)** | **R10 = mem(50)=** x”**01000000”** |
|  | **34** | **081F0064** | **Lw r31, 64(r0)** | **R31 = mem(54)= i** |
| bucle | **38** | **13E2000D** | **Beq r31, r2, FINBUC** |  |
|  | **3c** | **088B0000** | **Lw r11, 0(r4)** | **V1[i]** |
|  | **40** | **08AC0000** | **Lw r12, 0(r5)** | **V2[i]** |
|  | **44** | **056C6800** | **Add r13, r11,r12** | **R13= r11+r12** |
|  | **48** | **0CCD0000** | **Sw r13, 0(r6)** | **V3[i]=r13** |
|  | **4c** | **090E0000** | **Lw r14, 0(r8)** | **R8= reg Scratch** |
|  | **50** | **0CEE0000** | **Sw r14, 0(r7)** | **V4[i]= r14** |
|  | **54** | **080F0003** | **Lw r15 ,3(r0)** | **Produzco desalineado** |
|  | **58** | **04642000** | **Add r4,r4,r3** | **Base v1+4** |
|  | **5c** | **04652800** | **Add r5,r5,r3** | **Base v2+4** |
|  | **60** | **04663000** | **Add r6,r6,r3** | **Base v3+4** |
|  | **64** | **04673800** | **Add r7,r7,r3** | **Base v4+4** |
|  | **68** | **043FF800** | **Add r31,r31,r0** | **i++** |
|  | **6c** | **1021FFF2** | **Beq r1,r1,bucle** |  |
| finbucle | **70** | **1000FFFF** | **Beq r1,r1 finbucle** |  |
|  |  |  |  |  |
|  |  |  |  |  |
| RTI: | **100** | 20000000 | **RTE** |  |
|  |  |  |  |  |
| RT\_Abort | **104** | **094F0000** | **Lw r15 ,0(r10)** | **R15 = @desalineada** |
|  |  | **81E00000** | **WRO r15** | **OUT= r15** |
|  |  | **0D0F0004** | **Sw r15, 4(r8)** | **Escribo en scratch el contenido de r15** |
|  |  | 20000000 | **RTE** |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |