# 读写指令

## 读指令

1.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 名称 | Run | Id | Instaddr | func |
| 位宽(36) | 1 | 1 | 2 | 32 |
| 功能 |  |  |  |  |

1. Func

instaddr=0

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 名称 | Step0 | Size0 | base | fc\_size | fc | Read\_pic\_ready |
| 位宽（32） | 2 | 7 | 14 | 7 | 1 | 1 |
|  | [31:30] | [29:23] | [22:9] | [8:2] | 1 | 0 |

Instaddr=1

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 名称 | channel | mem\_sel | ram\_sel | RGB\_C | Scale\_n | scale | Step1 | Size1 |
| 位宽（31） | 3 | 1 | 1 | 1 | 5 | 9 | 7 | 5 |
|  | [31:29] | 28 | 27 | 26 | [25:21] | [20:12] | [11:5] | [4:0] |

Instaddr=2

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 名称 | first\_k | Last\_k | sftn | fc\_clear | finish | Pool\_en | Pool\_width | relu | acc\_size | acc\_base |
| 位宽(31) | 1 | 1 | 1 | 1 | 1 | 1 | 6 | 2 | 9 | 9 |
|  | 31 | 30 | 29 | 28 | 27 | 26 | [25:20] | [19:18] | [17:9] | [8:0] |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 52:44 | 43:37 | 36:32 | 31:30 | 29:23 | 22:9 | 8:2 | 1 | 0 |
| scale | Step1 | Size1 | step0 | size0 | base | Fc\_size | fc | R\_pic\_rdy |
| 89:84 | 83:82 | 81:73 | 72:64 | 63:61 | 60 | 59 | 58 | 57:53 |
| Pool\_w | relu | acc\_size | Acc  base | channel | memsel | ram\_sel | RGB\_C | Scale\_n |
|  |  |  | 95 | 94 | 93 | 92 | 91 | 90 |
|  |  |  | First\_k | Last\_k | sft | Fc clear | finish | Pool\_en |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 42:41 | 40:32 | 31:23 | 22 | 21:17 | 16:8 | 7:1 | 0 |
| relu | acc\_size | Acc  base | ram\_sel | Scale\_n | scale | Fc\_size | fc |
|  | 54 | 53 | 52 | 51 | 50 | 49 | 48:43 |
|  | firstk | lastk | Sftn | Fc clear | finish | Pool\_en | Pool\_w |

Acc\_info(黑&红) && Scale\_info（黑）

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 22:17 | 16:15 | 14 | 13:9 | 8:0 |
| Pool\_w | relu | ram\_sel | Scale\_n | scale |
| 27 | 26 | 25 | 24 | 23 |
| firstk | lastk | Sftn | finish | Pool\_en |

Pool\_info

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 8 | 7 | 6:1 | 0 |
|  | finish | Pool\_en | Pool\_w | ram\_sel |
|  |  |  |  |  |
|  |  |  |  |  |

## 写指令

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 名称 | Run | Id | instaddr | func |
| 位宽(36) | 1 | 1 | 2 | 32 |
| 功能 | 35 | 34 | 33:32 |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 名称 |  |  |  |  | Size | Base |
| 位宽(36) |  |  |  |  | 9 | 14 |
| 功能 |  |  |  |  | [22:14] | [13:0] |