The codes and results are in the attachment, MTK\_CE1\_ATMv6.1.rar.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Block size | Disparity vector derivation | VSP picture in the reference picture list | MV coding | Warping direction | Proponent |
| ATM (JCT2-A0107) | 2x2 | N/A | Insert | Skipped | Backward | Anchor |
| Test 1 | 4x4 | Max among 4 corners | Insert | Skipped | Backward | MediaTek |
| Test 2 | 4x4 | Other methods | Insert | Skipped | Backward |  |
| Test 3 | 2x2 | N/A | Remove | N/A | Backward | Qualcomm |
| Test 4 | 2x2 | N/A | Insert | Coded | Backward | NTT/MERL |
| Test 5 (1+3) | 4x4 | Max among 4 corners | Remove | N/A | Backward | MediaTek |
| Test 6 (1+4) | 4x4 | Max among 4 corners | Insert | Coded | Backward |  |
| Test 7 (2+3) | 4x4 | Other methods | Remove | N/A | Backward |  |
| Test 8 (2+4) | 4x4 | Other methods | Insert | Coded | Backward |  |
| Test 9 | 2x2 | N/A | Insert | Skipped | Forward | Zhejiang Univ. |
| Test 10 | 4x4 | Max among 4 corners | Insert | Skipped | Forward | Zhejiang Univ. |

Red ones (Test 1, 2, 5, 7) are the experiments we did.

Settings in encoder and decoder in ATMv6.1:

1. Test 1, results: test1\_bvsp\_4.xls

#define MTK\_INTERVIEW\_SKIP\_4      0 //partition to 4x4

#define MTK\_VSP\_OFF               0 //turn off vsp from config read

#define MTK\_IVS\_DEPTH\_AVG         0 //for interview skip mode

#define MTK\_BVSP4\_DEPTH\_AVG       0

#define BLOCK\_VSP\_T              4   //1 - 1x1, 2 - 2x2, 4  4x4

1. Test 2, results: test2\_bvsp\_4\_avg.xls

#define MTK\_INTERVIEW\_SKIP\_4      0 //partition to 4x4

#define MTK\_VSP\_OFF               0 //turn off vsp from config read

#define MTK\_IVS\_DEPTH\_AVG         0 //for interview skip mode

#define MTK\_BVSP4\_DEPTH\_AVG       1

#define BLOCK\_VSP\_T              4   //1 - 1x1, 2 - 2x2, 4  4x4

1. Test 5, results: test5\_iv\_skip.xls

#define MTK\_INTERVIEW\_SKIP\_4      1 //partition to 4x4

#define MTK\_VSP\_OFF               1 //turn off vsp from config read

#define MTK\_IVS\_DEPTH\_AVG         0 //for interview skip mode

#define MTK\_BVSP4\_DEPTH\_AVG       0

#define BLOCK\_VSP\_T              2   //1 - 1x1, 2 - 2x2, 4  4x4

1. Test 7, results: test7\_iv\_skip\_avg.xls

#define MTK\_INTERVIEW\_SKIP\_4      1 //partition to 4x4

#define MTK\_VSP\_OFF               1 //turn off vsp from config read

#define MTK\_IVS\_DEPTH\_AVG         1 //for interview skip mode

#define MTK\_BVSP4\_DEPTH\_AVG       0

#define BLOCK\_VSP\_T              2   //1 - 1x1, 2 - 2x2, 4  4x4