



## TABLE OF CONTENTS

|       |                                            |    |
|-------|--------------------------------------------|----|
| 1     | Introduction .....                         | 5  |
| 1.1   | Definitions .....                          | 5  |
| 1.2   | TapGeometry Value Naming Conventions ..... | 6  |
| 1.2.1 | TapGeometry Syntax .....                   | 6  |
| 1.2.2 | TapGeometryX Syntax .....                  | 6  |
| 1.2.3 | TapGeometryY Syntax .....                  | 6  |
| 1.2.4 | Examples.....                              | 7  |
| 2     | Parameter Values Descriptions.....         | 8  |
| 2.1   | One Tap .....                              | 8  |
| 2.1.1 | 1X and 1X_1Y .....                         | 8  |
| 2.2   | Two Taps.....                              | 8  |
| 2.2.1 | 1X2 and 1X2_1Y .....                       | 8  |
| 2.2.2 | 1X_1Y2.....                                | 9  |
| 2.2.3 | 1X_2YE .....                               | 9  |
| 2.2.4 | 2X and 2X_1Y .....                         | 10 |
| 2.2.5 | 2XE and 2XE_1Y .....                       | 10 |
| 2.2.6 | 2XM and 2XM_1Y .....                       | 11 |
| 2.2.7 | 2XR and 2XR_1Y.....                        | 11 |
| 2.3   | Three Taps .....                           | 11 |
| 2.3.1 | 1X3 and 1X3_1Y .....                       | 12 |
| 2.3.2 | 3X and 3X_1Y .....                         | 12 |
| 2.4   | Four Taps .....                            | 12 |
| 2.4.1 | 1X4 and 1X4_1Y .....                       | 13 |
| 2.4.2 | 1X2_1Y2.....                               | 13 |
| 2.4.3 | 1X2_2YE .....                              | 14 |
| 2.4.4 | 2X2 and 2X2_1Y .....                       | 14 |
| 2.4.5 | 2X2E and 2X2E_1Y .....                     | 15 |
| 2.4.6 | 2X2M and 2X2M_1Y .....                     | 15 |

|        |                      |    |
|--------|----------------------|----|
| 2.4.7  | 2X_1Y2.....          | 16 |
| 2.4.8  | 2X_2YE.....          | 16 |
| 2.4.9  | 2XE_1Y2.....         | 16 |
| 2.4.10 | 2XE_2YE.....         | 17 |
| 2.4.11 | 2XM_1Y2 .....        | 17 |
| 2.4.12 | 2XM_2YE .....        | 18 |
| 2.4.13 | 2XR_1Y2.....         | 18 |
| 2.4.14 | 2XR_2YE.....         | 18 |
| 2.4.15 | 4X and 4X_1Y.....    | 19 |
| 2.4.16 | 4XE and 4XE_1Y ..... | 19 |
| 2.4.17 | 4XR and 4XR_1Y ..... | 20 |
| 2.5    | Six Taps.....        | 20 |
| 2.5.1  | 1X3_1Y2.....         | 20 |
| 2.5.2  | 1X3_2YE.....         | 21 |
| 2.5.3  | 3X_1Y2.....          | 21 |
| 2.5.4  | 3X_2YE.....          | 22 |
| 2.6    | Eight Taps .....     | 22 |
| 2.6.1  | 1X8 and 1X8_1Y.....  | 22 |
| 2.6.2  | 1X4_1Y2.....         | 23 |
| 2.6.3  | 1X4_2YE.....         | 23 |
| 2.6.4  | 2X4 and 2X4_1Y.....  | 24 |
| 2.6.5  | 2X2_1Y2.....         | 24 |
| 2.6.6  | 2X2_2YE.....         | 25 |
| 2.6.7  | 2X2E_1Y2.....        | 25 |
| 2.6.8  | 2X2E_2YE.....        | 26 |
| 2.6.9  | 2X2M_1Y2 .....       | 26 |
| 2.6.10 | 2X2M_2YE .....       | 27 |
| 2.6.11 | 4X_1Y2.....          | 27 |
| 2.6.12 | 4X_2YE.....          | 28 |
| 2.6.13 | 4XE_1Y2.....         | 28 |

|        |                        |    |
|--------|------------------------|----|
| 2.6.14 | 4XE_2YE .....          | 29 |
| 2.6.15 | 4XR_1Y2.....           | 29 |
| 2.6.16 | 4XR_2YE.....           | 30 |
| 2.6.17 | 4X2 and 4X2_1Y .....   | 30 |
| 2.6.18 | 4X2E and 4X2E_1Y ..... | 31 |
| 2.6.19 | 8X and 8X_1Y .....     | 31 |
| 2.6.20 | 8XR and 8XR_1Y.....    | 32 |
| 2.7    | Ten Taps.....          | 32 |
| 2.7.1  | 1X10 and 1X10_1Y ..... | 32 |
| 2.7.2  | 10X_1Y.....            | 33 |

# 1 Introduction

## 1.1 Definitions

### Adjacent taps

Two taps are adjacent when the extracted pixels are adjacent on the same row or on the same column.

### REGION

A region is a rectangular area of adjacent pixels that are transferred in a raster-scan order through one or multiple **adjacent taps**.

### TAP

One pixel stream output port of the camera that delivers one pixel every clock cycle.

### TAP GEOMETRICAL Properties

A tap is characterized by the following properties:

**XStart**: X-position of the first extracted pixel of a camera readout cycle

**XEnd**: X-position of the last extracted pixel of a camera readout cycle

**XStep**: the difference of X-position between consecutive pixels of the same row; it is positive when X-position values are increasing along a row (left to right); it is negative otherwise.

**YStart**: Y-position of the first extracted pixel of a camera readout cycle

**YEnd**: Y-position of the last extracted pixel of a camera readout cycle

**YStep**: the difference of Y-position between consecutive rows of pixels; it is positive when Y-position values are increasing (top to bottom); it is negative otherwise.

**X-Position**: the pixel column number in the (non-flipped) image; column 1 is the leftmost column; column W is the rightmost column of an image having a width of W pixels.

**Y-Position**: the pixel row number in the (non-flipped) image; row 1 is the topmost row; row H is the bottommost row of an image having a height of H pixels.

## 1.2 TapGeometry Value Naming Conventions

This section describes the naming convention used for the values of the MultiCam parameter **TAPGEOMETRY**.

### 1.2.1 TapGeometry Syntax

There are two variants of the syntax:

For cameras delivering two or more rows of pixels every camera readout cycle:

**<TapGeometryX>\_<TapGeometryY>**

For cameras delivering only one row of pixels every camera, e.g. single line line-scan cameras:

**<TapGeometryX>**

### 1.2.2 TapGeometryX Syntax

**<TapGeometryX>** describes the geometrical organization of the taps along **one row** of the image.

It is built as follows:

**<XRegions>X(<XTaps>)(<ExtX>)**

**<XRegions>**: an integer declaring the number of regions encountered across one image row (= the X-direction or the horizontal direction). Possible values are 1, 2, 3, 4, 6, 8, and 10.

**<XTaps>**: an integer declaring the number of consecutive pixels along one region row that are extracted simultaneously.

Possible values are 1, 2, 3, 4, 8, and 10. The field is omitted when XTaps is 1.

**<ExtX>**: a letter declaring the relative location of the pixels extractors across one row of the image.

This field is omitted when all pixel extractors are at the left of each region.

Letter E indicates that pixel extractors are at both ends of the image row.

Letter M indicates that pixel extractors are at middle of the image row.

Letter R indicates that the pixel extractors are all at the right of each region

### 1.2.3 TapGeometryY Syntax

**<TapGeometryY>** describes the geometrical organization of the taps along **one column** of the image.

It is built as follows:

**<YRegions>Y(<YTaps>)(<ExtY>)**

**<YRegions>**: an integer declaring the number of regions encountered across vertical direction. Possible values are 1 and 2.

**<YTaps>**: an integer declaring the number of consecutive pixels along one region column that are extracted simultaneously.

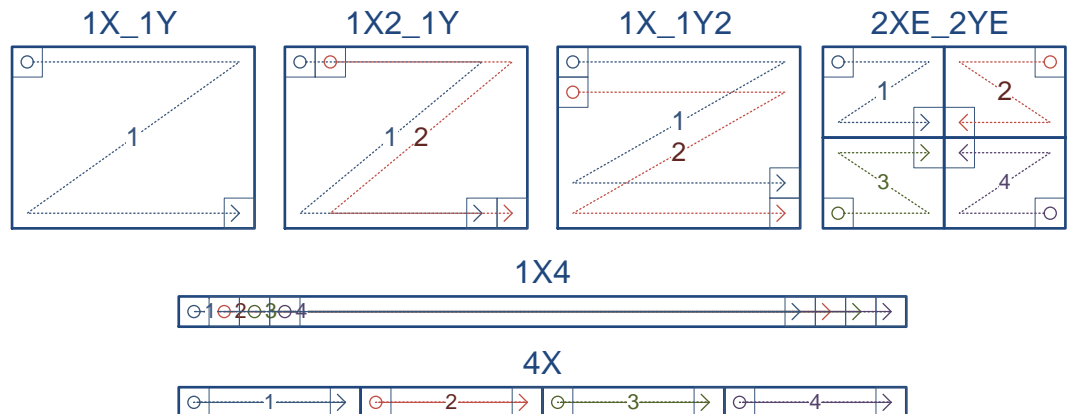
Possible values are 1 and 2. The field is omitted when YTaps is 1.

**<ExtY>**: a letter declaring the relative location of the pixels extractors across one column of the image.

This field is omitted when all pixel extractors are at the top of each region.

Letter E indicates that pixel extractors are at both ends of the image column.

## 1.2.4 Examples



**1X-1Y** designates the tap geometry of a **single-tap** camera having 1 region across the X-direction and 1 region across the Y direction.

The pixels are delivered **one** at a time on a single tap beginning with the leftmost pixel of the top row, scanning progressively all the rows of the image one by one, and ending with the rightmost pixel of the bottom row.

**1X2-1Y** designates the tap geometry of a **two-tap** camera having 1 region across the X-direction and 1 region across the Y direction.

The pixels are delivered **two** at a time on two taps beginning with the **two** leftmost pixels of the top row, scanning progressively all the rows of the image one by one, and ending with the **two** rightmost pixels of the bottom row.

**1X-1Y2** designates the tap geometry of a **two-tap** camera having 1 region across the X-direction and 1 region across the Y direction.

The pixels are delivered **two** at a time on two taps beginning with the **two** uppermost pixels of the first column, scanning progressively all the rows of the image **two by two**, and ending with the **two** lowermost pixels of the rightmost column.

**2XE-2YE** designates the tap geometry of a **four-tap** camera having 2 regions across the X-direction and 2 regions across the Y direction.

The pixels are delivered **four** at a time on four taps. Each region delivers its pixels on a single-tap using a specific scanning scheme:

The pixels of the upper left quadrant are delivered on tap 1 starting with the upper left pixel and ending with the lower right pixel of the region.

The pixels of the upper right quadrant are delivered on tap 2 starting with the upper rightmost pixel and ending with the lower left pixel of the region.

The pixels of the lower left quadrant are delivered on tap 3 starting with the lower left pixel and ending with the upper right pixel of the region.

The pixels of the lower right quadrant are delivered on tap 4 starting with the lower rightmost pixel and ending with the upper left pixel of the region.

**1X4** designates the tap geometry of a **four-tap** line-scan camera having 1 region across the X-direction. The pixels are delivered **four** at a time on four taps beginning with the **four** leftmost pixels and ending with the **four** rightmost pixels.

**4X** designates the tap geometry of a **four-tap** line-scan camera having 4 regions across the X-direction. The pixels are delivered **four** at a time on four taps. Each region delivers its pixels on a single-tap using a common scanning scheme beginning with the leftmost pixel and ending with the rightmost pixel.

## 2 Parameter Values Descriptions

This section describes all the values of the TapGeometry parameter. Values are grouped into sub-sections by number of taps, namely: 1, 2, 3, 4, 6, 8 or 10 taps.

### 2.1 One Tap

This sub-section describes all the TapGeometry values having one tap.

#### 2.1.1 1X and 1X\_1Y

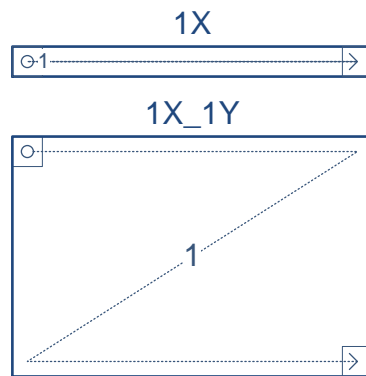


Table 1 - Taps Properties for 1X and 1X\_1Y

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W     | +1     | 1       | H     | +1     |

### 2.2 Two Taps

This sub-section describes all the TapGeometry values having two taps.

#### 2.2.1 1X2 and 1X2\_1Y

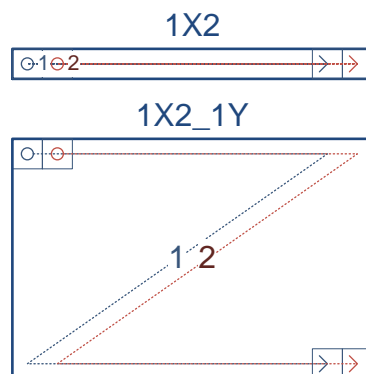


Table 2 - Taps Properties for 1X2 and 1X2\_1Y

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W-1   | +2     | 1       | H     | +1     |
| Tap2 | 2       | W     | +2     | 1       | H     | +1     |

## 2.2.2 1X\_1Y2

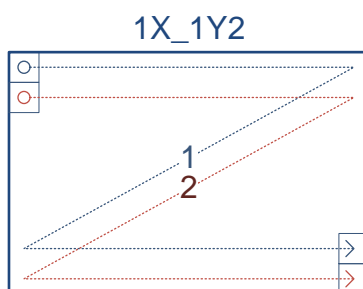


Table 3 - Taps Properties for 1X\_1Y2

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W     | +1     | 1       | H-1   | +2     |
| Tap2 | 1       | W     | +1     | 2       | H     | +2     |

## 2.2.3 1X\_2YE

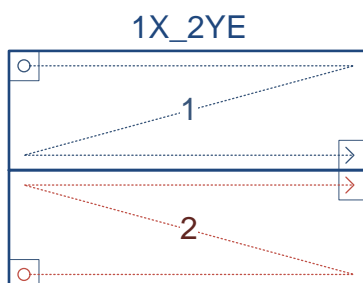


Table 4 - Taps Properties for 1X\_2YE

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W     | +1     | 1       | H/2   | +1     |
| Tap2 | 1       | W     | +1     | H       | H/2+1 | -1     |

## 2.2.4 2X and 2X\_1Y

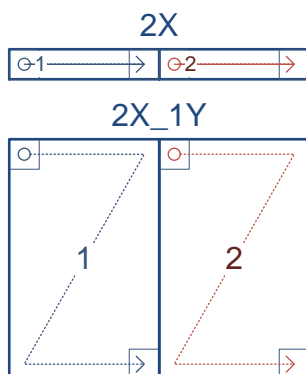


Table 5 - Taps Properties for 2X and 2X\_1Y

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W/2   | +1     | 1       | H     | +1     |
| Tap2 | W/2+1   | W     | +1     | 1       | H     | +1     |

## 2.2.5 2XE and 2XE\_1Y

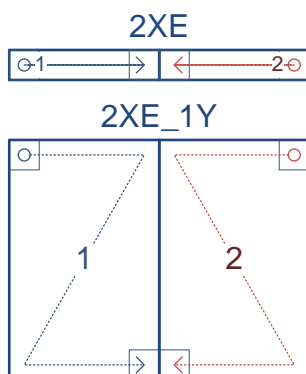


Table 6 - Taps Properties for 2XE and 2XE\_1Y

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W/2   | +1     | 1       | H     | +1     |
| Tap2 | W       | W/2+1 | -1     | 1       | H     | +1     |

## 2.2.6 2XM and 2XM\_1Y

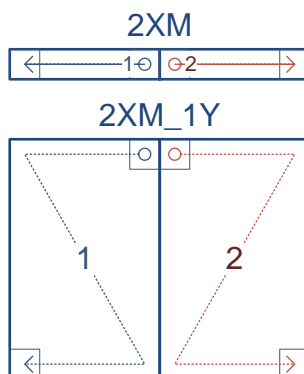


Table 7 - Taps Properties for 2XM and 2XM\_1Y

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | W/2     | 1     | -1     | 1       | H     | +1     |
| Tap2 | W/2+1   | W     | +1     | 1       | H     | +1     |

## 2.2.7 2XR and 2XR\_1Y

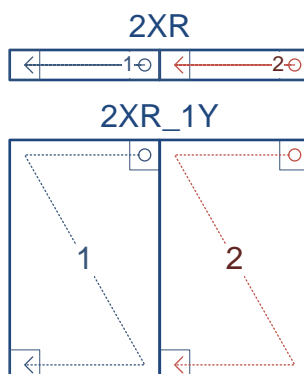


Table 8 - Taps Properties for 2XR and 2XR\_1Y

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | W/2     | 1     | -1     | 1       | H     | +1     |
| Tap2 | W       | W/2+1 | -1     | 1       | H     | +1     |

## 2.3 Three Taps

This sub-section describes all the TapGeometry values having three taps.

### 2.3.1 1X3 and 1X3\_1Y

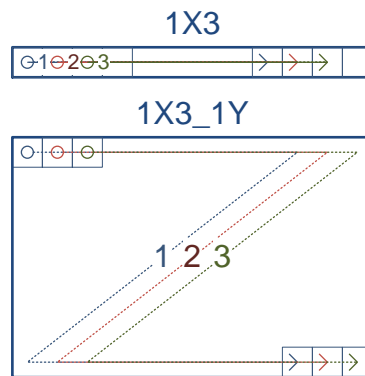


Table 9 - Taps Properties for 1X3 and 1X3\_1Y

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W-2   | +3     | 1       | H     | +1     |
| Tap2 | 2       | W-1   | +3     | 1       | H     | +1     |
| Tap3 | 3       | W     | +3     | 1       | H     | +1     |

### 2.3.2 3X and 3X\_1Y

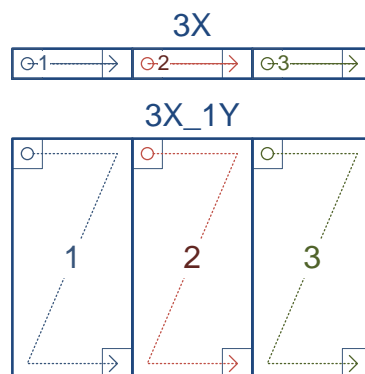


Table 10 - Taps Properties for 3X and 3X\_1Y

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W/3   | +1     | 1       | H     | +1     |
| Tap2 | W/3+1   | 2W/3  | +1     | 1       | H     | +1     |
| Tap3 | 2W/3+1  | W     | +1     | 1       | H     | +1     |

## 2.4 Four Taps

This sub-section describes all the TapGeometry values having four taps.

### 2.4.1 1X4 and 1X4\_1Y

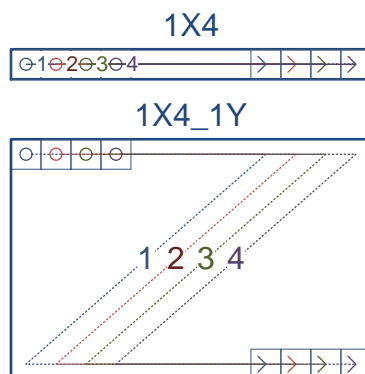


Table 11 - Taps Properties for 1X4 and 1X4\_1Y

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W-3   | +4     | 1       | H     | +1     |
| Tap2 | 2       | W-2   | +4     | 1       | H     | +1     |
| Tap3 | 3       | W-1   | +4     | 1       | H     | +1     |
| Tap4 | 4       | W     | +4     | 1       | H     | +1     |

### 2.4.2 1X2\_1Y2

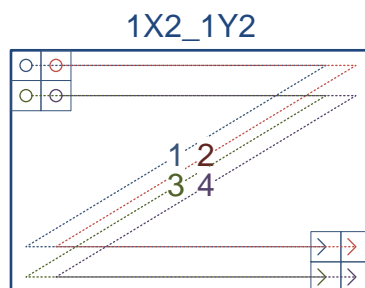


Table 12 - Taps Properties for 1X2\_1Y2

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W-1   | +2     | 1       | H-1   | +2     |
| Tap2 | 2       | W     | +2     | 1       | H-1   | +2     |
| Tap3 | 1       | W-1   | +2     | 2       | H     | +2     |
| Tap4 | 2       | W     | +2     | 2       | H     | +2     |

### 2.4.3 1X2\_2YE

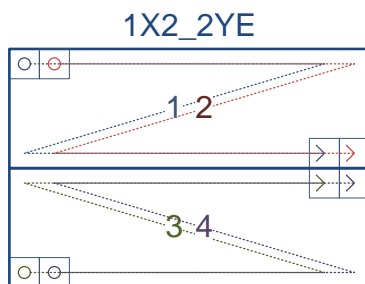


Table 13 - Taps Properties for 1X2\_2YE

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W-1   | +2     | 1       | H/2   | +1     |
| Tap2 | 2       | W     | +2     | 1       | H/2   | +1     |
| Tap3 | 1       | W-1   | +2     | H       | H/2+1 | -1     |
| Tap4 | 2       | W     | +2     | H       | H/2+1 | -1     |

### 2.4.4 2X2 and 2X2\_1Y

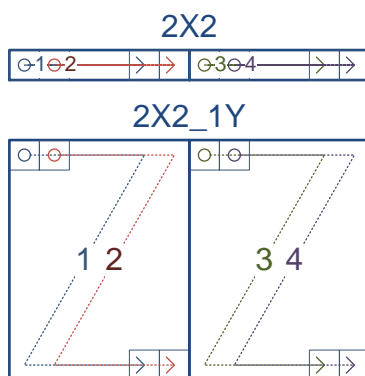


Table 14 - Taps Properties for 2X2 and 2X2\_1Y

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W/2-1 | +2     | 1       | H     | +1     |
| Tap2 | 2       | W/2   | +2     | 1       | H     | +1     |
| Tap3 | W/2+1   | W-1   | +2     | 1       | H     | +1     |
| Tap4 | W/2+2   | W     | +2     | 1       | H     | +1     |

## 2.4.5 2X2E and 2X2E\_1Y

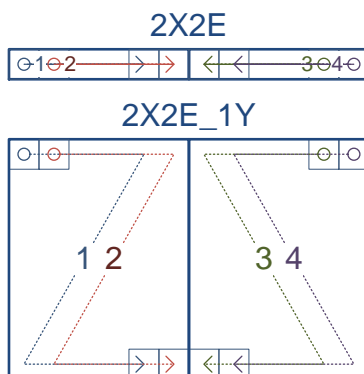


Table 15 - Taps Properties for 2X2E and 2X2E\_1Y

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W/2-1 | +2     | 1       | H     | +1     |
| Tap2 | 2       | W/2   | +2     | 1       | H     | +1     |
| Tap3 | W-1     | W/2+1 | -2     | 1       | H     | +1     |
| Tap4 | W       | W/2+2 | -2     | 1       | H     | +1     |

## 2.4.6 2X2M and 2X2M\_1Y

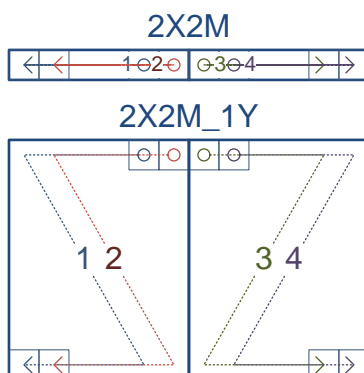


Table 16 - Taps Properties for 2X2M and 2X2M\_1Y

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | W/2-1   | 1     | -2     | 1       | H     | +1     |
| Tap2 | W/2     | 2     | -2     | 1       | H     | +1     |
| Tap3 | W/2+1   | W-1   | +2     | 1       | H     | +1     |
| Tap4 | W/2+2   | W     | +2     | 1       | H     | +1     |

### 2.4.7 2X\_1Y2

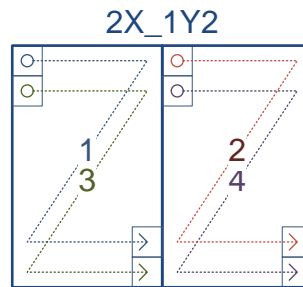


Table 17 - Taps Properties for 2X\_1Y2

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W/2   | +1     | 1       | H-1   | +2     |
| Tap2 | W/2+1   | W     | +1     | 1       | H-1   | +2     |
| Tap3 | 1       | W/2   | +1     | 2       | H     | +2     |
| Tap4 | W/2+1   | W     | +1     | 2       | H     | +2     |

### 2.4.8 2X\_2YE

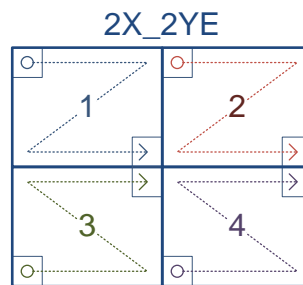


Table 18 - Taps Properties for 2X\_2YE

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W/2   | +1     | 1       | H/2   | +1     |
| Tap2 | W/2+1   | W     | +1     | 1       | H/2   | +1     |
| Tap3 | 1       | W/2   | +1     | H       | H/2+1 | -1     |
| Tap4 | W/2+1   | W     | +1     | H       | H/2+1 | -1     |

### 2.4.9 2XE\_1Y2

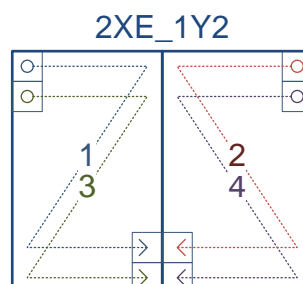


Table 19 - Taps Properties for 2XE\_1Y2

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W/2   | +1     | 1       | H-1   | +2     |
| Tap2 | W       | W/2+1 | -1     | 1       | H-1   | +2     |
| Tap3 | 1       | W/2   | +1     | 2       | H     | +2     |
| Tap4 | W       | W/2+1 | -1     | 2       | H     | +2     |

## 2.4.10 2XE\_2YE

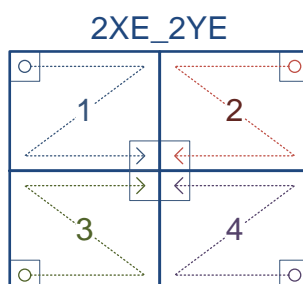


Table 20 - Taps Properties for 2XE\_2YE

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W/2   | +1     | 1       | H/2   | +1     |
| Tap2 | W       | W/2+1 | -1     | 1       | H/2   | +1     |
| Tap3 | 1       | W/2   | +1     | H       | H/2+1 | -1     |
| Tap4 | W       | W/2+1 | -1     | H       | H/2+1 | -1     |

## 2.4.11 2XM\_1Y2

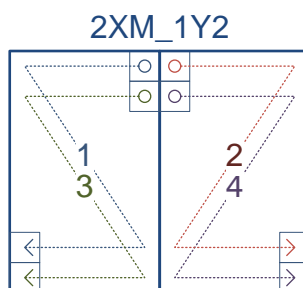


Table 21 - Taps Properties for 2XM\_1Y2

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | W/2     | 1     | -1     | 1       | H-1   | +2     |
| Tap2 | W/2+1   | W     | +1     | 1       | H-1   | +2     |
| Tap3 | W/2     | 1     | -1     | 2       | H     | +2     |
| Tap4 | W/2+1   | W     | +1     | 2       | H     | +2     |

### 2.4.12 2XM\_2YE

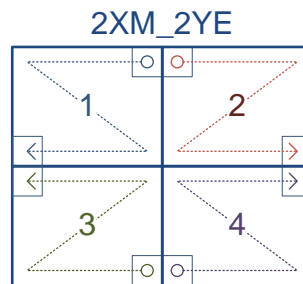


Table 22 - Taps Properties for 2XM\_2YE

| Tap# | X Start | X End | Step X | Y Start | Y End   | Step Y |
|------|---------|-------|--------|---------|---------|--------|
| Tap1 | $W/2$   | 1     | -1     | 1       | $H/2$   | +1     |
| Tap2 | $W/2+1$ | $W$   | +1     | 1       | $H/2$   | +1     |
| Tap3 | $W/2$   | 1     | -1     | $H$     | $H/2+1$ | -1     |
| Tap4 | $W/2+1$ | $W$   | +1     | $H$     | $H/2+1$ | -1     |

### 2.4.13 2XR\_1Y2

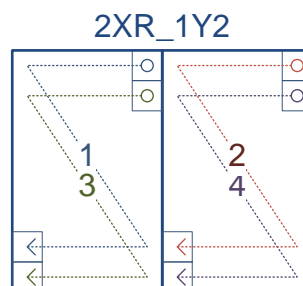


Table 23 - Taps Properties for 2XR\_1Y2

| Tap# | X Start | X End   | Step X | Y Start | Y End | Step Y |
|------|---------|---------|--------|---------|-------|--------|
| Tap1 | $W/2$   | 1       | -1     | 1       | $H-1$ | +2     |
| Tap2 | $W$     | $W/2+1$ | -1     | 1       | $H-1$ | +2     |
| Tap3 | $W/2$   | 1       | -1     | 2       | $H$   | +2     |
| Tap4 | $W$     | $W/2+1$ | -1     | 2       | $H$   | +2     |

### 2.4.14 2XR\_2YE

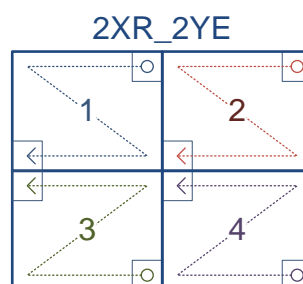


Table 24 - Taps Properties for 2XR\_2YE

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | W/2     | 1     | -1     | 1       | H/2   | +1     |
| Tap2 | W       | W/2+1 | -1     | 1       | H/2   | +1     |
| Tap3 | W/2     | 1     | -1     | H       | H/2+1 | -1     |
| Tap4 | W       | W/2+1 | -1     | H       | H/2+1 | -1     |

#### 2.4.15 4X and 4X\_1Y

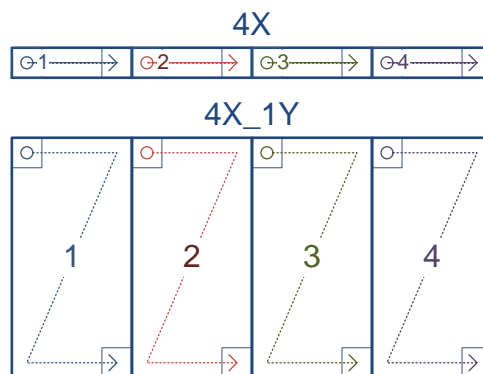


Table 25 - Taps Properties for 4X and 4X\_1Y

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W/4   | +1     | 1       | H     | +1     |
| Tap2 | W/4+1   | W/2   | +1     | 1       | H     | +1     |
| Tap3 | W/2+1   | 3W/4  | +1     | 1       | H     | +1     |
| Tap4 | 3W/4+1  | W     | +1     | 1       | H     | +1     |

#### 2.4.16 4XE and 4XE\_1Y

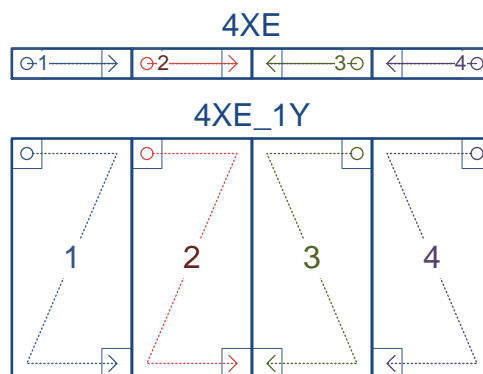


Table 26 - Taps Properties for 4XE and 4XE\_1Y

| Tap# | X Start | X End  | Step X | Y Start | Y End | Step Y |
|------|---------|--------|--------|---------|-------|--------|
| Tap1 | 1       | W/4    | +1     | 1       | H     | +1     |
| Tap2 | W/4+1   | W/2    | +1     | 1       | H     | +1     |
| Tap3 | 3W/4    | W/2+1  | -1     | 1       | H     | +1     |
| Tap4 | W       | 3W/4+1 | -1     | 1       | H     | +1     |

### 2.4.17 4XR and 4XR\_1Y

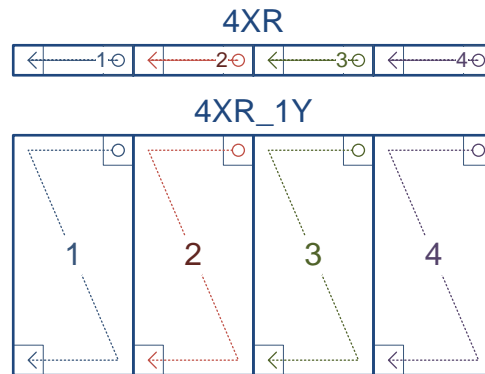


Table 27 - Taps Properties for 4XR and 4XR\_1Y

| Tap# | X Start | X End    | Step X | Y Start | Y End | Step Y |
|------|---------|----------|--------|---------|-------|--------|
| Tap1 | $W/4$   | 1        | -1     | 1       | H     | +1     |
| Tap2 | $W/2$   | $W/4+1$  | -1     | 1       | H     | +1     |
| Tap3 | $3W/4$  | $W/2+1$  | -1     | 1       | H     | +1     |
| Tap4 | W       | $3W/4+1$ | -1     | 1       | H     | +1     |

## 2.5 Six Taps

This sub-section describes all the TapGeometry values having six taps.

### 2.5.1 1X3\_1Y2

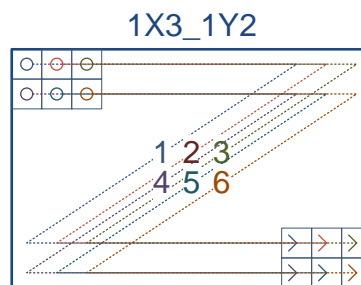


Table 28 - Taps Properties for 1X3\_1Y2

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | $W-2$ | +3     | 1       | $H-1$ | +2     |
| Tap2 | 2       | $W-1$ | +3     | 1       | $H-1$ | +2     |
| Tap3 | 3       | W     | +3     | 1       | $H-1$ | +2     |
| Tap4 | 1       | $W-2$ | +3     | 2       | H     | +2     |
| Tap5 | 2       | $W-1$ | +3     | 2       | H     | +2     |
| Tap6 | 3       | W     | +3     | 2       | H     | +2     |

## 2.5.2 1X3\_2YE

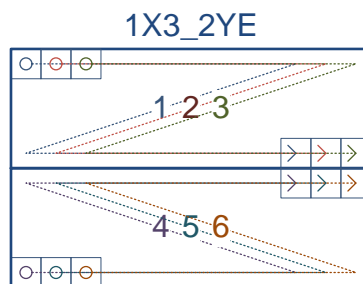


Table 29 - Taps Properties for 1X3\_2YE

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W-2   | +3     | 1       | H/2   | +1     |
| Tap2 | 2       | W-1   | +3     | 1       | H/2   | +1     |
| Tap3 | 3       | W     | +3     | 1       | H/2   | +1     |
| Tap4 | 1       | W-2   | +3     | H       | H/2+1 | -1     |
| Tap5 | 2       | W-1   | +3     | H       | H/2+1 | -1     |
| Tap6 | 3       | W     | +3     | H       | H/2+1 | -1     |

## 2.5.3 3X\_1Y2

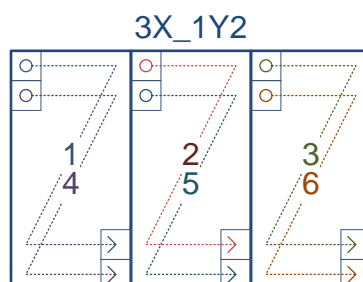


Table 30 - Taps Properties for 3X\_1Y2

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W/3   | +1     | 1       | H-1   | +2     |
| Tap2 | W/3+1   | 2W/3  | +1     | 1       | H-1   | +2     |
| Tap3 | 2W/3+1  | W     | +1     | 1       | H-1   | +2     |
| Tap4 | 1       | W/3   | +1     | 2       | H     | +2     |
| Tap5 | W/3+1   | 2W/3  | +1     | 2       | H     | +2     |
| Tap6 | 2W/3+1  | W     | +1     | 2       | H     | +2     |

## 2.5.4 3X\_2YE

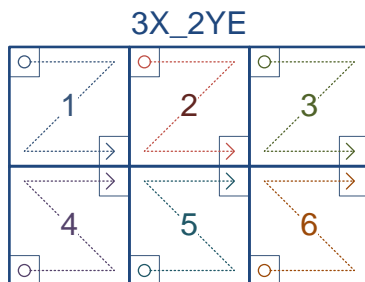


Table 31 - Taps Properties for 3X\_2YE

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W/3   | +1     | 1       | H/2   | +1     |
| Tap2 | W/3+1   | 2W/3  | +1     | 1       | H/2   | +1     |
| Tap3 | 2W/3+1  | W     | +1     | 1       | H/2   | +1     |
| Tap4 | 1       | W/3   | +1     | H       | H/2+1 | -1     |
| Tap5 | W/3+1   | 2W/3  | +1     | H       | H/2+1 | -1     |
| Tap6 | 2W/3+1  | W     | +1     | H       | H/2+1 | -1     |

## 2.6 Eight Taps

This sub-section describes all the TapGeometry values having eight taps.

### 2.6.1 1X8 and 1X8\_1Y

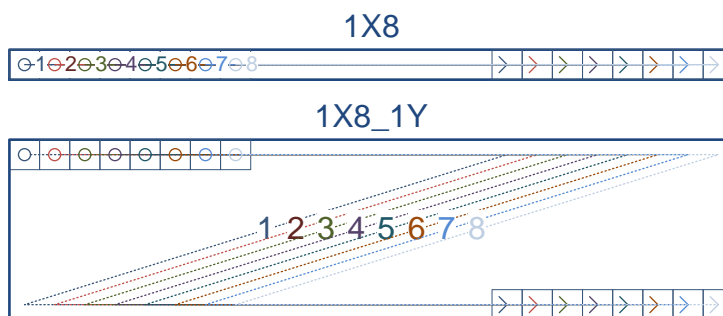


Table 32 - Taps Properties for 1X8 and 1X8\_1Y

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W-7   | +8     | 1       | H     | +1     |
| Tap2 | 2       | W-6   | +8     | 1       | H     | +1     |
| Tap3 | 3       | W-5   | +8     | 1       | H     | +1     |
| Tap4 | 4       | W-4   | +8     | 1       | H     | +1     |
| Tap5 | 5       | W-3   | +8     | 1       | H     | +1     |
| Tap6 | 6       | W-2   | +8     | 1       | H     | +1     |
| Tap7 | 7       | W-1   | +8     | 1       | H     | +1     |
| Tap8 | 8       | W     | +8     | 1       | H     | +1     |

## 2.6.2 1X4\_1Y2

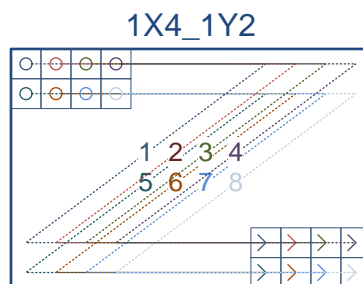


Table 33 - Taps Properties for 1X4\_1Y2

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W-3   | +4     | 1       | H-1   | +2     |
| Tap2 | 2       | W-2   | +4     | 1       | H-1   | +2     |
| Tap3 | 3       | W-1   | +4     | 1       | H-1   | +2     |
| Tap4 | 4       | W     | +4     | 1       | H-1   | +2     |
| Tap5 | 1       | W-3   | +4     | 2       | H     | +2     |
| Tap6 | 2       | W-2   | +4     | 2       | H     | +2     |
| Tap7 | 3       | W-1   | +4     | 2       | H     | +2     |
| Tap8 | 4       | W     | +4     | 2       | H     | +2     |

## 2.6.3 1X4\_2YE

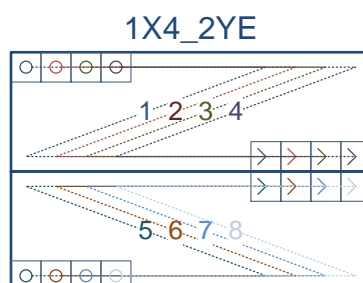


Table 34 - Taps Properties for 1X4\_2YE

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W-3   | +4     | 1       | H/2   | +1     |
| Tap2 | 2       | W-2   | +4     | 1       | H/2   | +1     |
| Tap3 | 3       | W-1   | +4     | 1       | H/2   | +1     |
| Tap4 | 4       | W     | +4     | 1       | H/2   | +1     |
| Tap5 | 1       | W-3   | +4     | H       | H/2+1 | -1     |
| Tap6 | 2       | W-2   | +4     | H       | H/2+1 | -1     |
| Tap7 | 3       | W-1   | +4     | H       | H/2+1 | -1     |
| Tap8 | 4       | W     | +4     | H       | H/2+1 | -1     |

## 2.6.4 2X4 and 2X4\_1Y

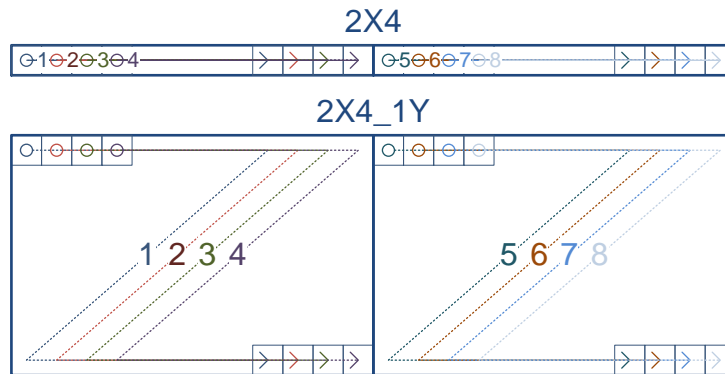


Table 35 - Taps Properties for 2X4 and 2X4\_1Y

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W/2-3 | +4     | 1       | H     | +1     |
| Tap2 | 2       | W/2-2 | +4     | 1       | H     | +1     |
| Tap3 | 3       | W/2-1 | +4     | 1       | H     | +1     |
| Tap4 | 4       | W/2   | +4     | 1       | H     | +1     |
| Tap5 | W/2+1   | W-3   | +4     | 1       | H     | +1     |
| Tap6 | W/2+2   | W-2   | +4     | 1       | H     | +1     |
| Tap7 | W/2+3   | W-1   | +4     | 1       | H     | +1     |
| Tap8 | W/2+4   | W     | +4     | 1       | H     | +1     |

## 2.6.5 2X2\_1Y2

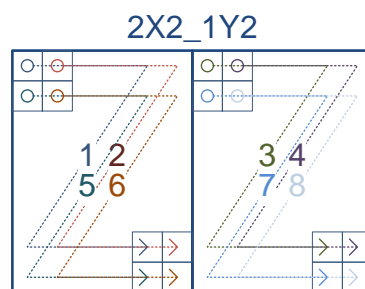


Table 36 - Taps Properties for 2X2\_1Y2

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W/2-1 | +2     | 1       | H-1   | +2     |
| Tap2 | 2       | W/2   | +2     | 1       | H-1   | +2     |
| Tap3 | W/2+1   | W-1   | +2     | 1       | H-1   | +2     |
| Tap4 | W/2+2   | W     | +2     | 1       | H-1   | +2     |
| Tap5 | 1       | W/2-1 | +2     | 2       | H     | +2     |
| Tap6 | 2       | W/2   | +2     | 2       | H     | +2     |
| Tap7 | W/2+1   | W-1   | +2     | 2       | H     | +2     |
| Tap8 | W/2+2   | W     | +2     | 2       | H     | +2     |

## 2.6.6 2X2\_2YE

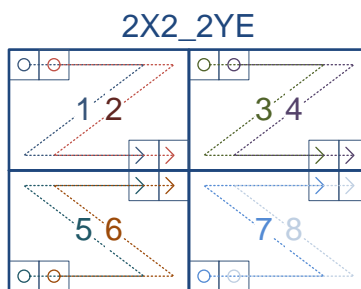


Table 37 - Taps Properties for 2X2\_2YE

| Tap# | X Start | X End   | Step X | Y Start | Y End   | Step Y |
|------|---------|---------|--------|---------|---------|--------|
| Tap1 | 1       | $W/2-1$ | +2     | 1       | $H/2$   | +1     |
| Tap2 | 2       | $W/2$   | +2     | 1       | $H/2$   | +1     |
| Tap3 | $W/2+1$ | $W-1$   | +2     | 1       | $H/2$   | +1     |
| Tap4 | $W/2+2$ | $W$     | +2     | 1       | $H/2$   | +1     |
| Tap5 | 1       | $W/2-1$ | +2     | H       | $H/2+1$ | -1     |
| Tap6 | 2       | $W/2$   | +2     | H       | $H/2+1$ | -1     |
| Tap7 | $W/2+1$ | $W-1$   | +2     | H       | $H/2+1$ | -1     |
| Tap8 | $W/2+2$ | $W$     | +2     | H       | $H/2+1$ | -1     |

## 2.6.7 2X2E\_1Y2

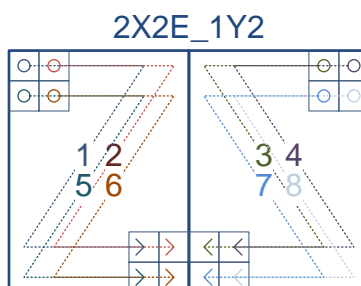


Table 38 - Taps Properties for 2X2E\_1Y2

| Tap# | X Start | X End   | Step X | Y Start | Y End | Step Y |
|------|---------|---------|--------|---------|-------|--------|
| Tap1 | 1       | $W/2-1$ | +2     | 1       | $H-1$ | +2     |
| Tap2 | 2       | $W/2$   | +2     | 1       | $H-1$ | +2     |
| Tap3 | $W-1$   | $W/2+1$ | -2     | 1       | $H-1$ | +2     |
| Tap4 | $W$     | $W/2+2$ | -2     | 1       | $H-1$ | +2     |
| Tap5 | 1       | $W/2-1$ | +2     | 2       | H     | +2     |
| Tap6 | 2       | $W/2$   | +2     | 2       | H     | +2     |
| Tap7 | $W-1$   | $W/2+1$ | -2     | 2       | H     | +2     |
| Tap8 | $W$     | $W/2+2$ | -2     | 2       | H     | +2     |

## 2.6.8 2X2E\_2YE

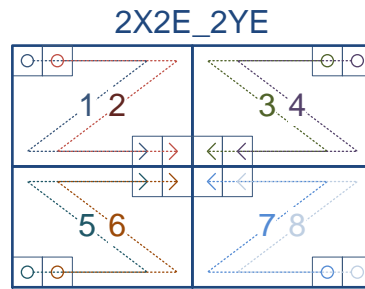


Table 39 - Taps Properties for 2X2E\_2YE

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W/2-1 | 2      | 1       | H/2   | +1     |
| Tap2 | 2       | W/2   | 2      | 1       | H/2   | +1     |
| Tap3 | W-1     | W/2+1 | -2     | 1       | H/2   | +1     |
| Tap4 | W       | W/2+2 | -2     | 1       | H/2   | +1     |
| Tap5 | 1       | W/2-1 | 2      | H       | H/2+1 | -1     |
| Tap6 | 2       | W/2   | 2      | H       | H/2+1 | -1     |
| Tap7 | W-1     | W/2+1 | -2     | H       | H/2+1 | -1     |
| Tap8 | W       | W/2+2 | -2     | H       | H/2+1 | -1     |

## 2.6.9 2X2M\_1Y2

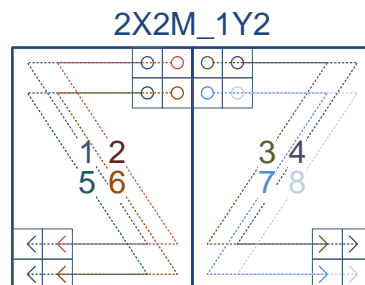


Table 40 - Taps Properties for 2X2M\_1Y2

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | W/2-1   | 1     | -2     | 1       | H-1   | +2     |
| Tap2 | W/2     | 2     | -2     | 1       | H-1   | +2     |
| Tap3 | W/2+1   | W-1   | +2     | 1       | H-1   | +2     |
| Tap4 | W/2+2   | W     | +2     | 1       | H-1   | +2     |
| Tap5 | W/2-1   | 1     | -2     | 2       | H     | +2     |
| Tap6 | W/2     | 2     | -2     | 2       | H     | +2     |
| Tap7 | W/2+1   | W-1   | +2     | 2       | H     | +2     |
| Tap8 | W/2+2   | W     | +2     | 2       | H     | +2     |

## 2.6.10 2X2M\_2YE

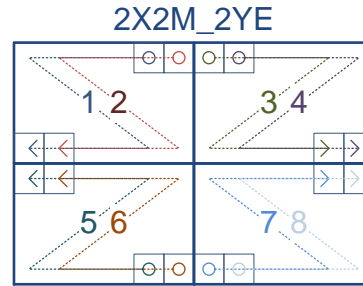


Table 41 - Taps Properties for 2X2M\_2YE

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | W/2-1   | 1     | -2     | 1       | H/2   | +1     |
| Tap2 | W/2     | 2     | -2     | 1       | H/2   | +1     |
| Tap3 | W/2+1   | W-1   | +2     | 1       | H/2   | +1     |
| Tap4 | W/2+2   | W     | +2     | 1       | H/2   | +1     |
| Tap5 | W/2-1   | 1     | -2     | H       | H/2+1 | -1     |
| Tap6 | W/2     | 2     | -2     | H       | H/2+1 | -1     |
| Tap7 | W/2+1   | W-1   | +2     | H       | H/2+1 | -1     |
| Tap8 | W/2+2   | W     | +2     | H       | H/2+1 | -1     |

## 2.6.11 4X\_1Y2

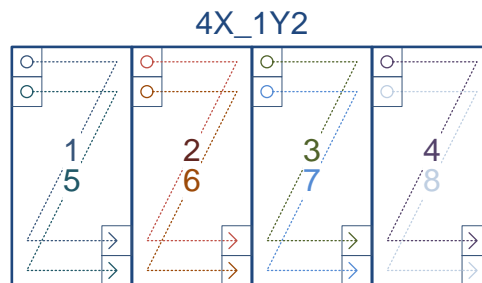


Table 42 - Taps Properties for 4X\_1Y2

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W/4   | +1     | 1       | H-1   | +2     |
| Tap2 | W/4+1   | W/2   | +1     | 1       | H-1   | +2     |
| Tap3 | W/2+1   | 3W/4  | +1     | 1       | H-1   | +2     |
| Tap4 | 3W/4+1  | W     | +1     | 1       | H-1   | +2     |
| Tap5 | 1       | W/4   | +1     | 2       | H     | +2     |
| Tap6 | W/4+1   | W/2   | +1     | 2       | H     | +2     |
| Tap7 | W/2+1   | 3W/4  | +1     | 2       | H     | +2     |
| Tap8 | 3W/4+1  | W     | +1     | 2       | H     | +2     |

## 2.6.12 4X\_2YE

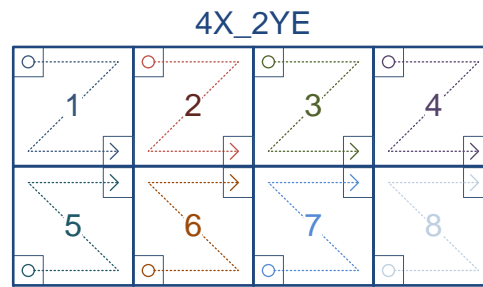


Table 43 - Taps Properties for 4X\_2YE

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W/4   | +1     | 1       | H/2   | +1     |
| Tap2 | W/4+1   | W/2   | +1     | 1       | H/2   | +1     |
| Tap3 | W/2+1   | 3W/4  | +1     | 1       | H/2   | +1     |
| Tap4 | 3W/4+1  | W     | +1     | 1       | H/2   | +1     |
| Tap5 | 1       | W/4   | +1     | H       | H/2+1 | -1     |
| Tap6 | W/4+1   | W/2   | +1     | H       | H/2+1 | -1     |
| Tap7 | W/2+1   | 3W/4  | +1     | H       | H/2+1 | -1     |
| Tap8 | 3W/4+1  | W     | +1     | H       | H/2+1 | -1     |

## 2.6.13 4XE\_1Y2

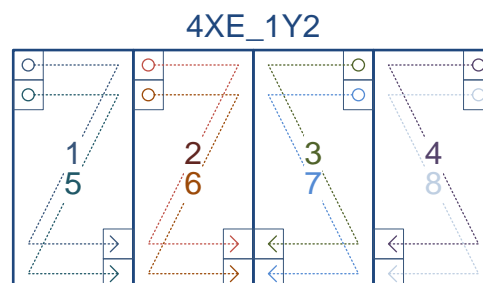


Table 44 - Taps Properties for 4XE\_1Y2

| Tap# | X Start | X End  | Step X | Y Start | Y End | Step Y |
|------|---------|--------|--------|---------|-------|--------|
| Tap1 | 1       | W/4    | +1     | 1       | H-1   | +2     |
| Tap2 | W/4+1   | W/2    | +1     | 1       | H-1   | +2     |
| Tap3 | 3W/4    | W/2+1  | -1     | 1       | H-1   | +2     |
| Tap4 | W       | 3W/4+1 | -1     | 1       | H-1   | +2     |
| Tap5 | 1       | W/4    | +1     | 2       | H     | +2     |
| Tap6 | W/4+1   | W/2    | +1     | 2       | H     | +2     |
| Tap7 | 3W/4    | W/2+1  | -1     | 2       | H     | +2     |
| Tap8 | W       | 3W/4+1 | -1     | 2       | H     | +2     |

## 2.6.14 4XE\_2YE

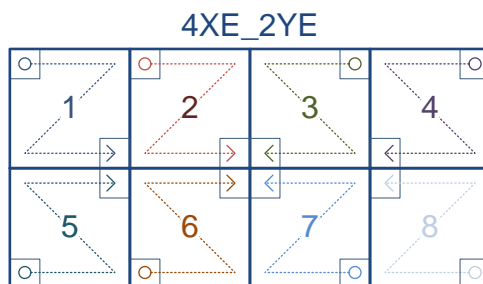


Table 45 - Taps Properties for 4XE\_2YE

| Tap# | X Start | X End  | Step X | Y Start | Y End | Step Y |
|------|---------|--------|--------|---------|-------|--------|
| Tap1 | 1       | W/4    | +1     | 1       | H/2   | +1     |
| Tap2 | W/4+1   | W/2    | +1     | 1       | H/2   | +1     |
| Tap3 | 3W/4    | W/2+1  | -1     | 1       | H/2   | +1     |
| Tap4 | W       | 3W/4+1 | -1     | 1       | H/2   | +1     |
| Tap5 | 1       | W/4    | +1     | H       | H/2+1 | -1     |
| Tap6 | W/4+1   | W/2    | +1     | H       | H/2+1 | -1     |
| Tap7 | 3W/4    | W/2+1  | -1     | H       | H/2+1 | -1     |
| Tap8 | W       | 3W/4+1 | -1     | H       | H/2+1 | -1     |

## 2.6.15 4XR\_1Y2

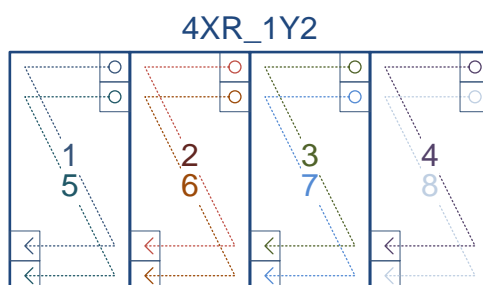


Table 46 - Taps Properties for 4XR\_1Y2

| Tap# | X Start | X End  | Step X | Y Start | Y End | Step Y |
|------|---------|--------|--------|---------|-------|--------|
| Tap1 | W/4     | 1      | -1     | 1       | H-1   | +2     |
| Tap2 | W/2     | W/4+1  | -1     | 1       | H-1   | +2     |
| Tap3 | 3W/4    | W/2+1  | -1     | 1       | H-1   | +2     |
| Tap4 | W       | 3W/4+1 | -1     | 1       | H-1   | +2     |
| Tap5 | W/4     | 1      | -1     | 2       | H     | +2     |
| Tap6 | W/2     | W/4+1  | -1     | 2       | H     | +2     |
| Tap7 | 3W/4    | W/2+1  | -1     | 2       | H     | +2     |
| Tap8 | W       | 3W/4+1 | -1     | 2       | H     | +2     |

## 2.6.16 4XR\_2YE

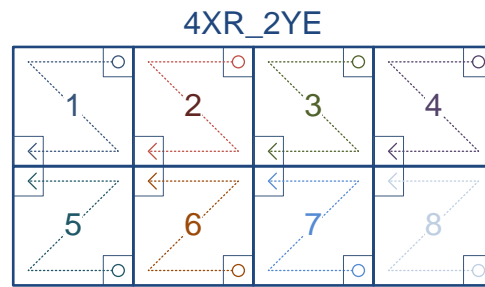


Table 47 - Taps Properties for 4XR\_2YE

| Tap# | X Start | X End  | Step X | Y Start | Y End | Step Y |
|------|---------|--------|--------|---------|-------|--------|
| Tap1 | W/4     | 1      | -1     | 1       | H/2   | +1     |
| Tap2 | W/2     | W/4+1  | -1     | 1       | H/2   | +1     |
| Tap3 | 3W/4    | W/2+1  | -1     | 1       | H/2   | +1     |
| Tap4 | W       | 3W/4+1 | -1     | 1       | H/2   | +1     |
| Tap5 | W/4     | 1      | -1     | H       | H/2+1 | -1     |
| Tap6 | W/2     | W/4+1  | -1     | H       | H/2+1 | -1     |
| Tap7 | 3W/4    | W/2+1  | -1     | H       | H/2+1 | -1     |
| Tap8 | W       | 3W/4+1 | -1     | H       | H/2+1 | -1     |

## 2.6.17 4X2 and 4X2\_1Y

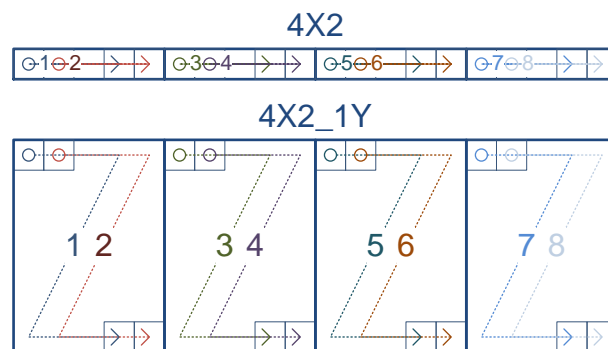


Table 48 - Taps Properties for 4X2 and 4X2\_1Y

| Tap# | X Start | X End  | Step X | Y Start | Y End | Step Y |
|------|---------|--------|--------|---------|-------|--------|
| Tap1 | 1       | W/4-1  | +2     | 1       | H     | +1     |
| Tap2 | 2       | W/4    | +2     | 1       | H     | +1     |
| Tap3 | W/4+1   | W/2-1  | +2     | 1       | H     | +1     |
| Tap4 | W/4+2   | W/2    | +2     | 1       | H     | +1     |
| Tap5 | W/2+1   | 3W/4-1 | +2     | 1       | H     | +1     |
| Tap6 | W/2+2   | 3W/4   | +2     | 1       | H     | +1     |
| Tap7 | 3W/4+1  | W-1    | +2     | 1       | H     | +1     |
| Tap8 | 3W/4+2  | W      | +2     | 1       | H     | +1     |

## 2.6.18 4X2E and 4X2E\_1Y

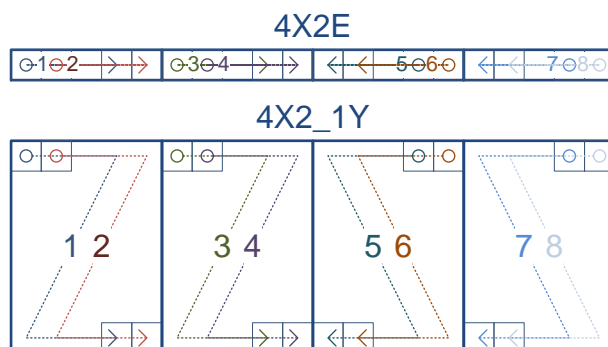


Table 49 - Taps Properties for 4X2E and 4X2E\_1Y

| Tap# | X Start | X End  | Step X | Y Start | Y End | Step Y |
|------|---------|--------|--------|---------|-------|--------|
| Tap1 | 1       | W/4-1  | +2     | 1       | H     | +1     |
| Tap2 | 2       | W/4    | +2     | 1       | H     | +1     |
| Tap3 | W/4+1   | W/2-1  | +2     | 1       | H     | +1     |
| Tap4 | W/4+2   | W/2    | +2     | 1       | H     | +1     |
| Tap5 | 3W/4-1  | W/2+1  | -2     | 1       | H     | +1     |
| Tap6 | 3W/4    | W/2+2  | -2     | 1       | H     | +1     |
| Tap7 | W-1     | 3W/4+1 | -2     | 1       | H     | +1     |
| Tap8 | W       | 3W/4+2 | -2     | 1       | H     | +1     |

## 2.6.19 8X and 8X\_1Y

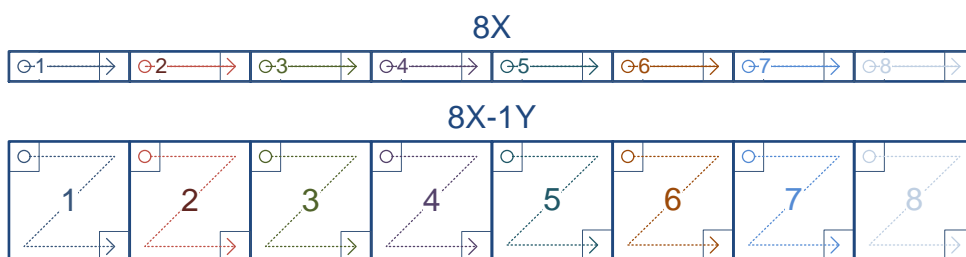


Table 50 - Taps Properties for 8X and 8X\_1Y

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W/8   | +1     | 1       | H     | +1     |
| Tap2 | W/8+1   | 2W/8  | +1     | 1       | H     | +1     |
| Tap3 | 2W/8+1  | 3W/8  | +1     | 1       | H     | +1     |
| Tap4 | 3W/8+1  | 4W/8  | +1     | 1       | H     | +1     |
| Tap5 | 4W/8+1  | 5W/8  | +1     | 1       | H     | +1     |
| Tap6 | 5W/8+1  | 6W/8  | +1     | 1       | H     | +1     |
| Tap7 | 6W/8+1  | 7W/8  | +1     | 1       | H     | +1     |
| Tap8 | 7W/8+1  | W     | +1     | 1       | H     | +1     |

## 2.6.20 8XR and 8XR\_1Y

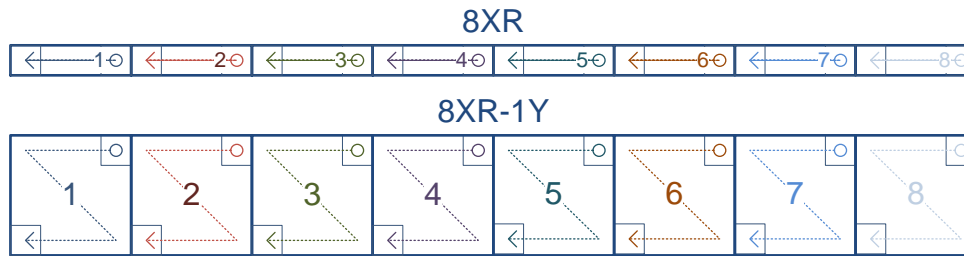


Table 51 - Taps Properties for 8XR and 8XR\_1Y

| Tap# | X Start | X End  | Step X | Y Start | Y End | Step Y |
|------|---------|--------|--------|---------|-------|--------|
| Tap1 | W/8     | 1      | -1     | 1       | H     | +1     |
| Tap2 | 2W/8    | W/8+1  | -1     | 1       | H     | +1     |
| Tap3 | 3W/8    | 2W/8+1 | -1     | 1       | H     | +1     |
| Tap4 | 4W/8    | 3W/8+1 | -1     | 1       | H     | +1     |
| Tap5 | 5W/8    | 4W/8+1 | -1     | 1       | H     | +1     |
| Tap6 | 6W/8    | 5W/8+1 | -1     | 1       | H     | +1     |
| Tap7 | 7W/8    | 6W/8+1 | -1     | 1       | H     | +1     |
| Tap8 | W       | 7W/8+1 | -1     | 1       | H     | +1     |

## 2.7 Ten Taps

This sub-section describes all the TapGeometry values having ten taps.

### 2.7.1 1X10 and 1X10\_1Y

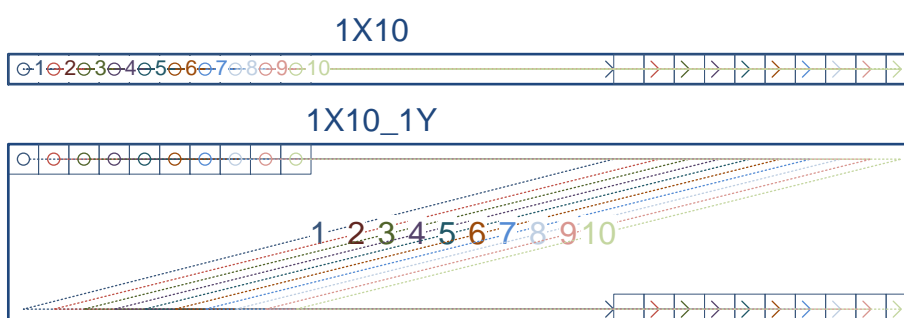
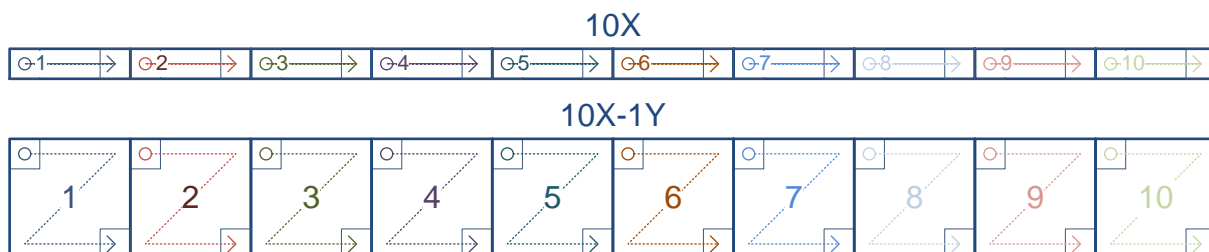


Table 52 - Taps Properties for 1X10 and 1X10\_1Y

| Tap# | X Start | X End | Step X | Y Start | Y End | Step Y |
|------|---------|-------|--------|---------|-------|--------|
| Tap1 | 1       | W-9   | +10    | 1       | H     | +1     |
| Tap2 | 2       | W-8   | +10    | 1       | H     | +1     |
| Tap3 | 3       | W-7   | +10    | 1       | H     | +1     |
| Tap4 | 4       | W-6   | +10    | 1       | H     | +1     |
| Tap5 | 5       | W-5   | +10    | 1       | H     | +1     |
| Tap6 | 6       | W-4   | +10    | 1       | H     | +1     |
| Tap7 | 7       | W-3   | +10    | 1       | H     | +1     |

|       |    |     |     |   |   |    |
|-------|----|-----|-----|---|---|----|
| Tap8  | 8  | W-2 | +10 | 1 | H | +1 |
| Tap9  | 9  | W-1 | +10 | 1 | H | +1 |
| Tap10 | 10 | W   | +10 | 1 | H | +1 |

## 2.7.2 10X\_1Y



**Table 53 - Taps Properties for 10X and 10X\_1Y**

| Tap#  | X Start | X End | Step X | Y Start | Y End | Step Y |
|-------|---------|-------|--------|---------|-------|--------|
| Tap1  | 1       | W/10  | +1     | 1       | H     | +1     |
| Tap2  | W/10+1  | 2W/10 | +1     | 1       | H     | +1     |
| Tap3  | 2W/10+1 | 3W/10 | +1     | 1       | H     | +1     |
| Tap4  | 3W/10+1 | 4W/10 | +1     | 1       | H     | +1     |
| Tap5  | 4W/10+1 | 5W/10 | +1     | 1       | H     | +1     |
| Tap6  | 5W/10+1 | 6W/10 | +1     | 1       | H     | +1     |
| Tap7  | 6W/10+1 | 7W/10 | +1     | 1       | H     | +1     |
| Tap8  | 7W/10+1 | 8W/10 | +1     | 1       | H     | +1     |
| Tap9  | 8W/10+1 | 9W/10 | +1     | 1       | H     | +1     |
| Tap10 | 9W/10+1 | W     | +1     | 1       | H     | +1     |

---

Copyright Euresys S.A.

2013