

# gp53cdf

March 25, 2026

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`i2xy`

*Convert (x,y)-coordinates to single-number indices and back.*

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## Description

Convert (x,y)-coordinates on the chip (and in the CEL file) to the single-number indices used in AffyBatch and CDF environment, and back.

## Usage

```
i2xy(i)
xy2i(x,y)
```

## Arguments

|                |  |
|----------------|--|
| <code>x</code> | numeric. x-coordinate (from 1 to 256)          |
| <code>y</code> | numeric. y-coordinate (from 1 to 256)          |
| <code>i</code> | numeric. single-number index (from 1 to 65536) |

## Details

Type `i2xy` and `xy2i` at the R prompt to view the function definitions.

## See Also

[gp53cdf](#)

## Examples

```
xy2i(5,5)
i      = 1:(256*256)
coord = i2xy(i)
j      = xy2i(coord[, "x"], coord[, "y"])
stopifnot(all(i==j))
range(coord[, "x"])
range(coord[, "y"])
```

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gp53cdf

*gp53cdf*

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**Description**

environment describing the CDF file

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gp53dim

*gp53dim*

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**Description**

environment describing the CDF dimensions

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