

# makePlatformDesign

April 19, 2010

---

makePDpackage

*Platform Design Package Maker*

---

## Description

This function creates the Platform Design package for Affymetrix and NimbleGen chips.  
The objects generated by this package are soon going to be created by the `pdInfoBuilder` package.  
For Affymetrix SNP arrays, use the `pdInfoBuilder` package.

## Usage

```
makePDpackage(designFile, file1 = NULL, file2 = NULL,
              manufacturer = c("affymetrix", "nimblegen"),
              type = c("expression", "SNP", "tiling", "exon"),
              extra = NULL, genomebuild = "hg12")
```

## Arguments

<code>designFile</code>	a string with the name of the CDF/NDF file
<code>file1</code>	the FASTA/tab sequence file or the XYS file
<code>file2</code>	the annotation or *.POS file
<code>manufacturer</code>	a choice between "affymetrix" or "nimblegen"
<code>type</code>	array type: "expression", "SNP", "tiling" or "exon"
<code>extra</code>	a list with several options for customization
<code>genomebuild</code>	genome build information

## Details

`designFile` is either a CDF or an NDF file, depending on the platform being used.  
`file1` is the FASTA sequence file if using an Affymetrix SNP Chip. It will be the tab-delimited sequence file if using an Affymetrix Expression Chip. If using a NimbleGen Chip, then it is an XYS file.  
`file2` is the annotation file for Affymetrix Chips or the \*.POS file for NimbleGen Chips. Required for SNP Chips, optional otherwise.

`extra` is a list containing \*all\* the following elements: "packagename" (desired package name), "cdf.path" (path to the CDF), "package.path" (path where the package is to be saved), "author" (author of the package), "maintainer" (maintainer of the package), "version" (version of the package), "unlink" (boolean, deletes the package.path dir if it already exists), "verbose" (boolean).

### Value

Either an `affysnpBatch` or an `affyexprsBatch` object, depending on the type of the array (SNP or expression).

### Author(s)

Benilton Carvalho <bcarvalh@jhsph.edu>

### See Also

`writePackage`

### Examples

```
## NOT RUN
##
## -- Affymetrix Expression Chip --
## makePDpackage("CDF", "TAB-sequence-file", manufacturer="affymetrix",
##               type="expression")
##
## -- Affymetrix SNP Chip --
## makePDpackage("CDF", "FASTA", "ANNOT", manufacturer="affymetrix",
##               type="SNP")
##
## -- NimbleGen Expression Chip --
## makePDpackage("NDF", "XYS", "POS", manufacturer="nimblegen",
##               type="expression")
```

Internal Functions *Internal Functions for makePlatformDesign*

### Description

Internal functions.

# Index

## \*Topic manip

Internal Functions, 2  
makePDpackage, 1  
  
assign2env (Internal Functions), 2  
  
basecontent (Internal Functions),  
2  
  
complementSeq (Internal  
Functions), 2  
  
getInfoInFile (Internal  
Functions), 2  
getSeq (Internal Functions), 2  
getTabSeq (Internal Functions), 2  
goodname (Internal Functions), 2  
  
Internal Functions, 2  
isComp (Internal Functions), 2  
  
longestConsecutive (Internal  
Functions), 2  
  
makeBPMAPenv (Internal  
Functions), 2  
makeCDFenv (Internal Functions), 2  
makeNDFenv (Internal Functions), 2  
makePDpackage, 1  
makePDpackage.old (Internal  
Functions), 2  
makePGFenv (Internal Functions), 2  
makeSNPenv (Internal Functions), 2  
matchprobes (Internal Functions),  
2  
mmSNP (Internal Functions), 2  
myAggregate (Internal Functions),  
2  
  
pmormmm (Internal Functions), 2  
pmormmm2 (Internal Functions), 2  
  
readAnnot (Internal Functions), 2  
readFasta (Internal Functions), 2  
readndf (Internal Functions), 2  
  
readndfplex (Internal Functions),  
2  
readrawndf (Internal Functions), 2  
readSNPCDF (Internal Functions), 2  
readSNPTxtCDF (Internal  
Functions), 2  
reverseSeq (Internal Functions), 2  
  
snpChange (Internal Functions), 2  
subSeq (Internal Functions), 2  
  
txtCDFintoRList (Internal  
Functions), 2  
  
writePackage, 2  
writePackage (Internal  
Functions), 2