

What's New in DEF C/C++ Programming Interface

Product Version 5.7
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Cadence Design Systems, Inc., 555 River Oaks Parkway, San Jose, CA 95134, USA

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What's New in DEF 5.7 C/C++ Programming Interface

About This Manual

This document provides information on new and changed features for version 5.7 of the C and C++ application programming interface (API) used to read and write Cadence® Design Exchange Format (DEF) files.

How This Document Is Organized

This *What's New* document is organized into the following chapters:

- **New Features**

This chapter describes features that were added since version 5.6 of the DEF API. New features are those that introduce new functionality into the DEF API. Any enhancements made to existing statements to support a new feature are also described in this chapter.

- **Changed Features**

This chapter discusses features that were changed since version 5.6 of the DEF API. Changed features include such things as changes in default behavior, changes in whether keywords and statements are required, and any other changes that do not reflect new functionality.

Related Documents

The following documents provide detailed information about LEF and DEF, and the LEF and DEF application programming interfaces.

- [DEF C/C++ Programming Interface \(Open Licensing Program\)](#)
- [LEF C/C++ Programming Interface \(Open Licensing Program\)](#)
- [LEF/DEF Language Reference](#)
- [What's New in LEF C/C++ Programming Interface](#)
- [What's New in LEF/DEF](#)

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About This Manual

New Features

This chapter describes the new features that were added in this release of the DEF application programming interface.

- [Reader Class Routines](#) on page 6
- [Writer Routines](#) on page 6

Reader Class Routines

The following reader class routines were added in this release:

- defiPinPort

For more information, see “DEF Reader Classes” in the *DEF C/C++ Programming Interface (Open Licensing Program)*.

Writer Routines

The following writer routines were added in this release:

- Blockages
 - defwBlockageLayerExceptpgnet
 - defwBlockagePlacementPartial
 - defwBlockagePlacementSoft
- Components
 - defwComponentHaloSoft
 - defwComponentRouteHalo
- Fills
 - defwFillLayerOPC
 - defwFillPoints
 - defwFillVia
 - defwFillViaOPC
- Pins
 - defwPinPort
 - defwPinPortLayer
 - defwPinPortLocation
 - defwPinPortPolygon
 - defwPinPortVia

What's New in DEF 5.7 C/C++ Programming Interface

New Features

❑ defwPinVia

For more information, see “DEF Writer Routines” in the *DEF C/C++ Programming interface (Open Licensing Program)*.

What's New in DEF 5.7 C/C++ Programming Interface

New Features

Changed Features

This chapter describes the features that were changed in this release of the DEF application programming interface.

- [Obsolete Information](#) on page 10
- [Reader Class Routines](#) on page 10

Obsolete Information

None.

Reader Class Routines

The following syntax was added to the listed reader class routines.

defiBlockage

```
int hasExceptpgnet() const;
int hasSoft() const;
int hasPartial() const;
double placementMaxDensity() const;
```

For more information, see “[defiBlockage](#)” in the *DEF C/C++ Programming Interface Open Licensing Program*).

defiComponent

```
int hasHaloSoft() const;
int hasRouteHalo() const;
int haloDist() const;
const char* minLayer() const;
const char* maxLayer() const;
```

For more information, see “[defiComponent](#)” in the *DEF C/C++ Programming Interface Open Licensing Program*).

defiFill

```
int hasLayerOpc() const;
struct defiPoints getPolygon(int index) const;
int hasVia() const;
const char* viaName() const;
int hasViaOpc() const;
int numViaPts() const;
struct defiPoints getViaPts(int index) const;
```

For more information, see “[defiFill](#)” in the *DEF C/C++ Programming Interface Open Licensing Program*).

What's New in DEF 5.7 C/C++ Programming Interface

Changed Features

defiNonDefault

```
const char* layerName(int index) const;
int hasLayerDiagWidth(int index) const;
int hasLayerSpacing(int index) const;
int hasLayerWireExt(int index) const;
```

defiPin

```
int numVias() const;
const char* viaName(int index) const;
int viaPtX (int index) const;
int viaPtY (int index) const;
int  hasPort() const;
int  numPorts() const;
defiPinPort* pinPort(int index) const;
```

For more information, see [“defiPin”](#) in the *DEF C/C++ Programming Interface Open Licensing Program*).

What's New in DEF 5.7 C/C++ Programming Interface

Changed Features
