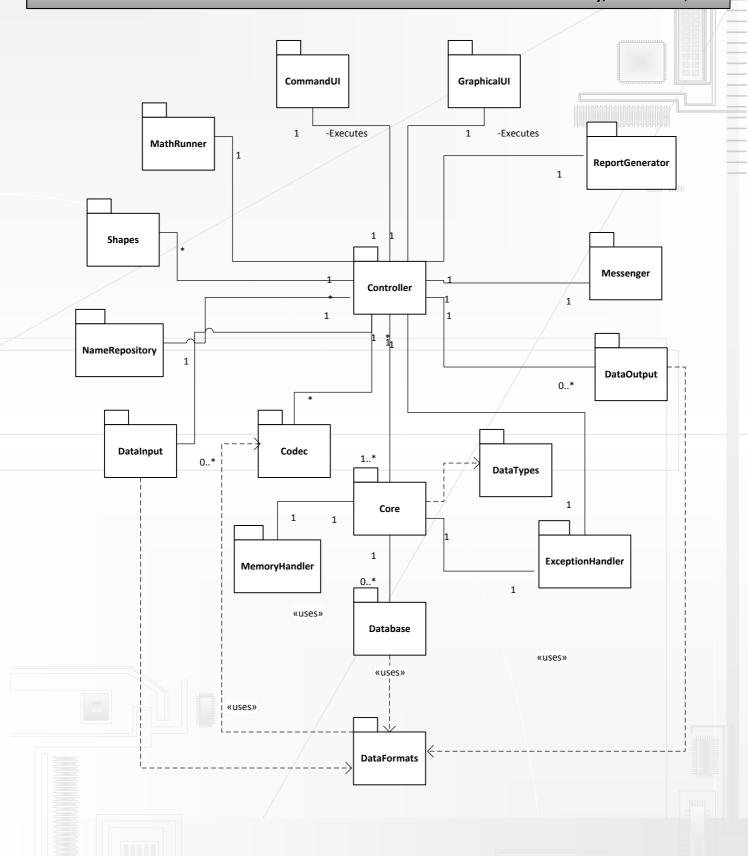
Electronic CAD Software System Architecture

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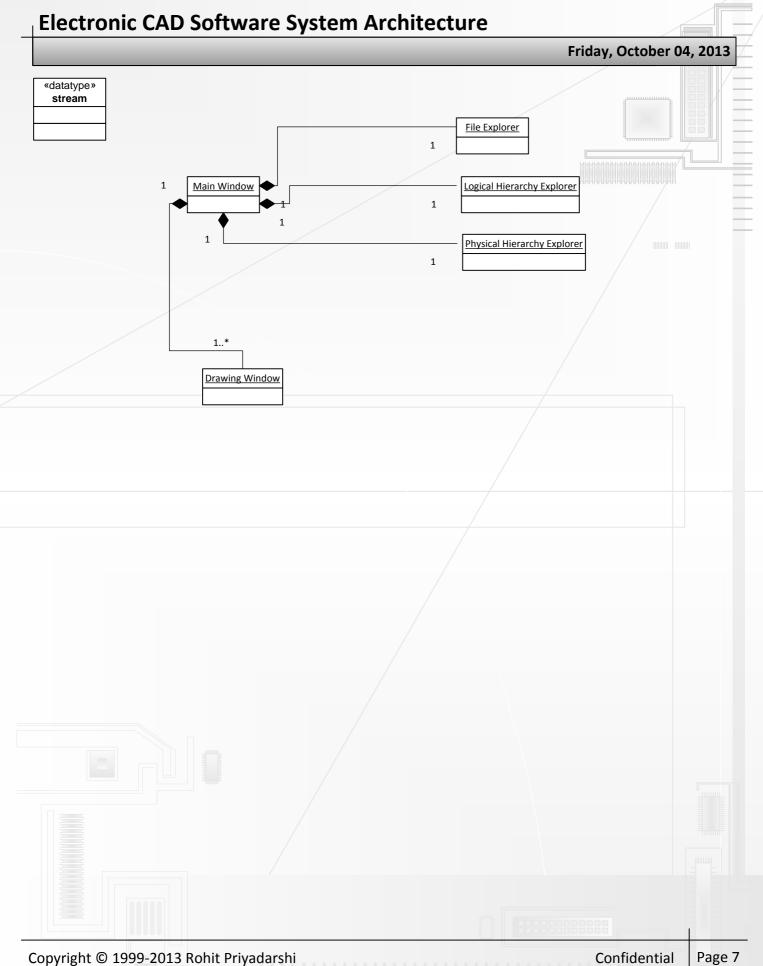
Electronic CAD Software System Architecture Friday, October 04, 2013 EntityBase ViewManager -id : unsigned long -name : Composite String Technology 1 HDL::HDL 1..* Core Library Design 1 Page 2 Confidential

Electronic CAD Software System Architecture Friday, October 04, 2013 «datatype» CommandUI::stream «datatype» libc++::stream «datatype» DataOutput::stream 1 MessageStream router : MessageRouter «datatype» MessageRouter GraphicalUI::stream verbosity: bool enabled : unsigned char +print() : void -redirection : unsigned char +operator <<() : void Stream Interface O +configure(): void +message(): Message 1 «datatype» «uses» libc++::cout 1 «datatype» MessageRepository libc++::cerr

Electronic CAD Software System Architecture Friday, October 04, 2013 Data Formats::LEF 1 Data Formats::DEF Data Formats::Verilog 1 Data Formats::VHDL Data Formats::DSPF 1 Data Formats::Liberty eCAD::Controller 1 Data Formats::SDF 1 1 1 1 Data Formats::RSPF Data Formats::SCF Data Formats::XML Data Formats::tcl 1 1

Electronic CAD Software System Architecture Friday, October 04, 2013 MemoryAllocator +new() +delete() AllocatorInterface O-+enable() : void +disable() : void





Electronic CAD Software System Architecture Friday, October 04, 2013 eCAD::Codec eCAD::Controller 1 Data Formats::XML

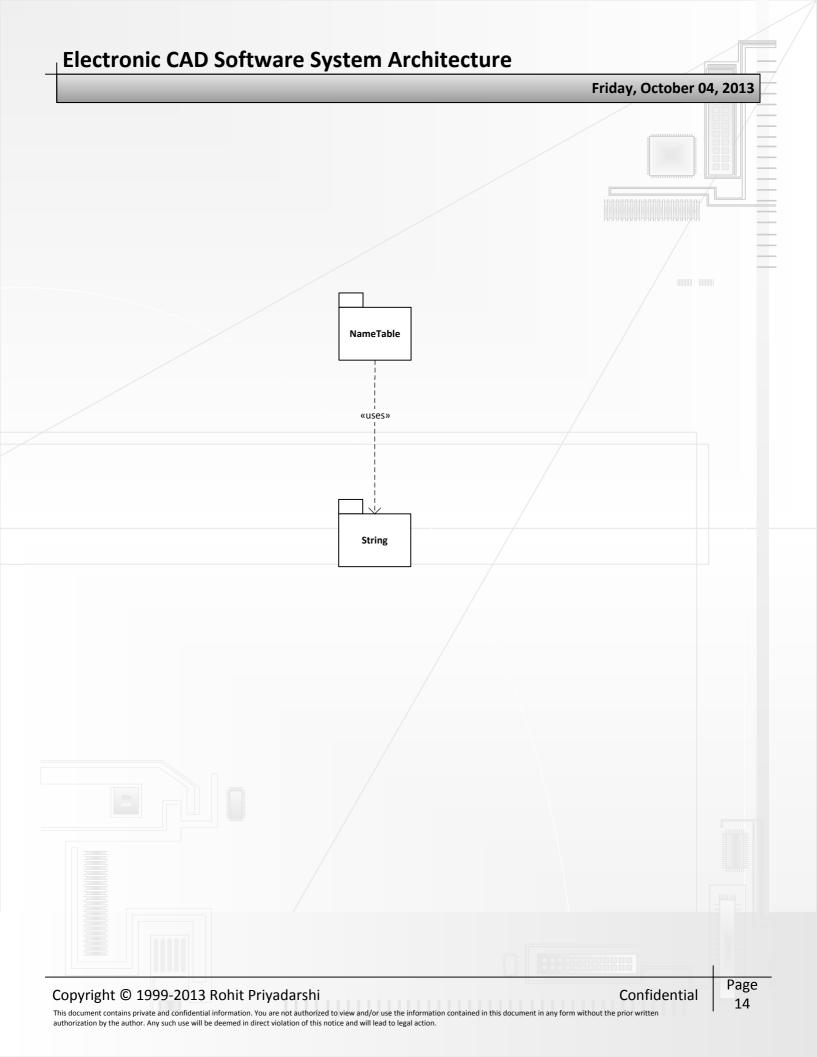
Electronic CAD Software System Architecture Friday, October 04, 2013 «datatype» STL::exception MessageRepository:: Message Exception -type : MessageType -message : Message message Package Interface +message(): Message 1_{«uses»} Messenger::MessageStream -router : MessageRouter -verbosity : bool Messenger:: MessageRepository +print() : void +operator <<(): void +configure() : void +message(): Message

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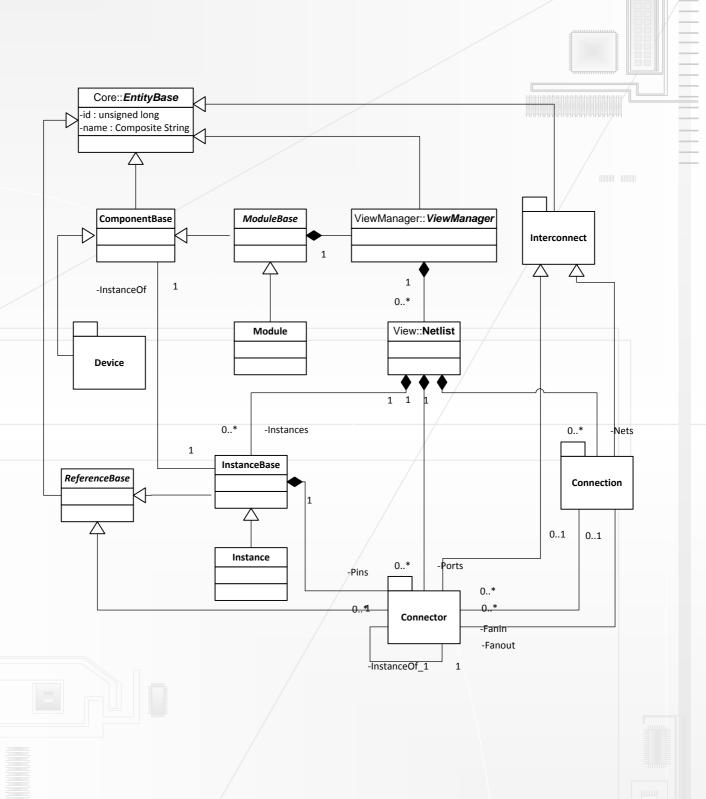
Electronic CAD Software System Architecture Friday, October 04, 2013 «uses» eCAD::GraphicalUI «uses» «uses» eCAD::CommandUI ShapeBase +draw() Interface1 O-+transform() Point Line Circle Polygon Rectangle Page Copyright © 1999-2013 Rohit Priyadarshi Confidential 15

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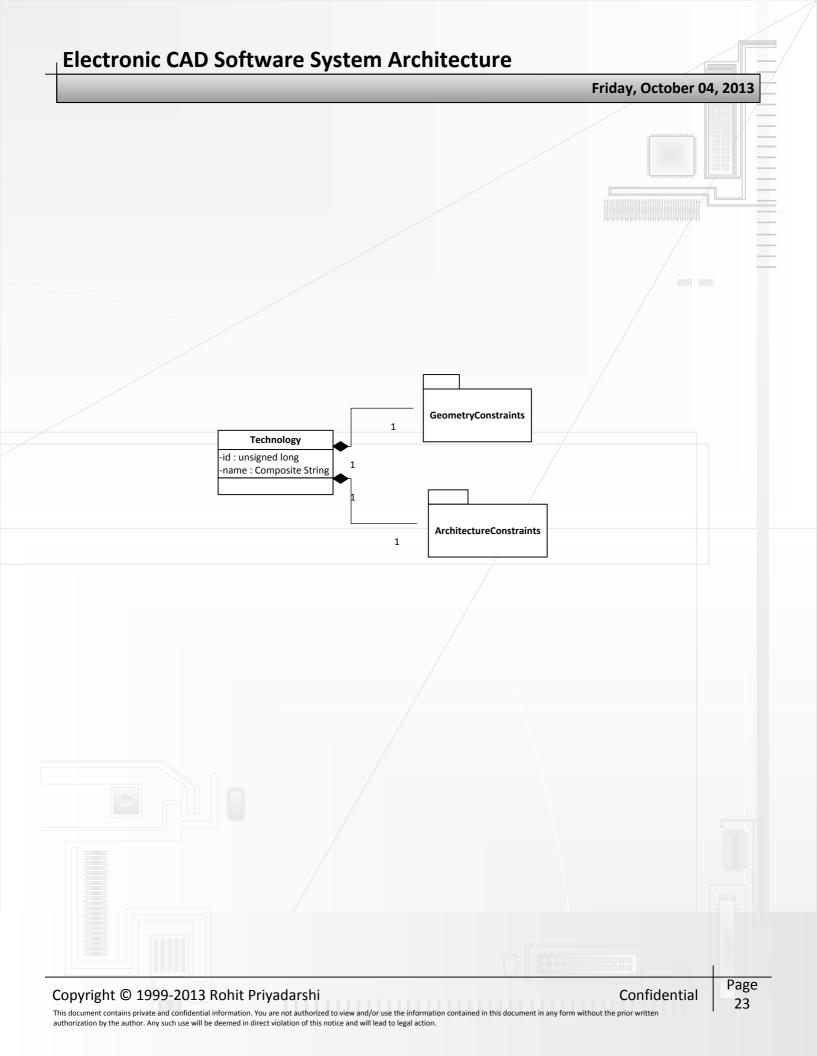
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Electronic CAD Software System Architecture Friday, October 04, 2013 LayerBase id : unsigned long -name: Composite String NonRoutingLayer RoutingLayer Page Copyright © 1999-2013 Rohit Priyadarshi Confidential 28 This document contains private and confidential information. You are not authorized to view and/or use the information contained in this document in any form without the prior written authorization by the author. Any such use will be deemed in direct violation of this notice and will lead to legal action.

Electronic CAD Software System Architecture Friday, October 04, 2013 Array -id : unsigned long -id: unsigned long -name : Composite String -name : Composite String Page Copyright © 1999-2013 Rohit Priyadarshi Confidential 29 This document contains private and confidential information. You are not authorized to view and/or use the information contained in this document in any form without the prior written authorization by the author. Any such use will be deemed in direct violation of this notice and will lead to legal action.

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Electronic CAD Software System Architecture Friday, October 04, 2013 Netlist:: ReferenceBase ConnectorBase -direction : Signal LinkPinBase **PinBase PortBase** SteinerBase LinkPin Pin Port SteinerPin Page Copyright © 1999-2013 Rohit Priyadarshi Confidential 32

Electronic CAD Software System Architecture Friday, October 04, 2013 «uses» Data Formats::XML LanguageMapper MessageTable MessageText table : vector id: unsigned int 1 -message : String description : String MesageBuilder -table : MessageTable -message : Message Message Interface O +create() : Message «enumeration» Message MessageType -type: MessageType +Fatal 1 -message +Error +Warning +Information +Debug Level 0 +Debug Level 1 +Debug Level 2 +Debug Level 3 +Debug Level 4 +Debug Level 5 +Debug Level 6 +Debug Level 7 +Debug Level 8 +Debug Level 9 Page Copyright © 1999-2013 Rohit Priyadarshi Confidential 35

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