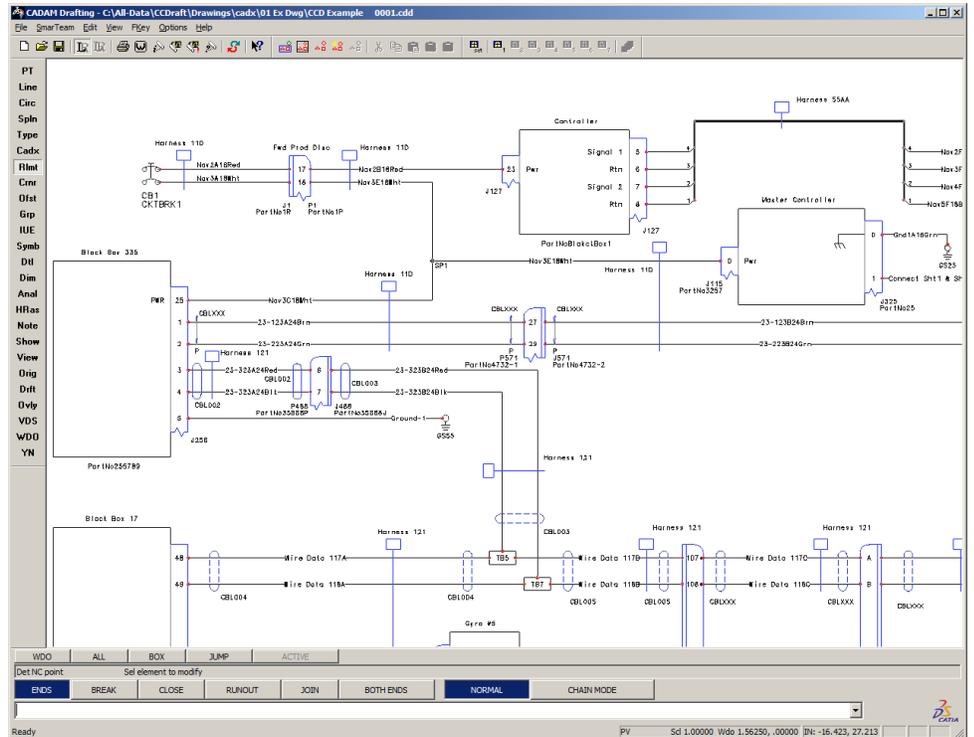# CADEX

CATIA CADAM DRAFTING

CADEX

CADAM Drafting's CADEX provides powerful tools for the creation of schematics and intelligent wiring diagrams. CADEX users can:

- Create intelligent schematics
- Create and manage libraries
- Add intelligence to parts and libraries in support of operations including design-rule checking and generating from-to lists
- Design and generate reports such as bills of materials from single drawings or spanning entire projects
- Pass electrical metadata as SQL data to downstream processes
- Migrate legacy CADEX (Mainframe CADAM and PROFESSIONAL CADAM) and LDX programs to CADAM Drafting V4 or V5
- Pass intelligence to V5 CATIA 3D wire harness design and routing tools

Create Intelligent Schematics

Schematic components can be created with intelligent attributes such as part number, component rating, or manufacturer. Components can be also stored in libraries with intelligent information applied with every use.

Wiring diagrams created by CADEX can be evaluated for design rule compliance. Examples of rules include duplicate pin numbers, components missing part numbers or reference designators, sheet extensions that are not matched, and many more. CADEX will graphically identify rule conflicts with a halo centered on the non-compliant area.

The built-in intelligence of CADEX schematics allows reports such as "from-to" lists, bills of material, net lists, and equipment and parts lists to be automatically created. A rich set of parameters helps to build custom reports too.

CADEX also provides output in comma separated values (CSV) format that is convenient for use by downstream processes in addition to SQL database format.

Create and Manage Libraries

CADEX includes utilities to create libraries that are easily accessed and used in design work. Libraries can be cre-ated by individuals to their own specifications, or system librar-ies can be created to enforce company standards. The libraries provide storage efficiency, rapid retrieval of existing designs, and greater control over the entire design process.

Support Your Entire Enterprise

Mechanical engineers gain productivity by creating and using intelligent libraries. Designs are efficiently managed by manipu-lating complex part and assembly relationships. Electrical and electromechanical engineers create and extract information from schematics and wiring diagrams. Design rules are verified and netlists, or from-to lists, generated and analyzed. Materials and process engineers, manufacturing engineers, and corpo-rate standards personnel use CADEX's intelligence in the design process, and CADEX's reports to understand and validate de-signs.

Organize and Manage Data

Define and manage relationships between complex mechanical assemblies, subassemblies, parts, and schematics with CADEX's hierarchy management. Graphic elements are com-bined to form parts that can then be operated upon as single entities. Parts or entire drawings can be nested under higher-level components or assemblies. Users operate or navigate at

any level. Selection of a lower level component within a drawing will automatically find and open the drawing of the component!

Intelligent attributes such as electrical characteristics can be defined and managed in hierarchical intelligent layers. Users can interactively navigate through those layers to interrogate and report on complex data models.

Add Value with Intelligent Attributes

The association of attributes to parts, components, assemblies, and schematics adds value to designs and the design process. Design functions such as Design Rules Verification are supported. Data are supplied to other engineering programs such as circuit analysis applications, and reports such as assembly weight or price are generated. Intelligent and programmatically identifiable attributes are easily added through an interactive icon and panel-driven processes, and/or through linkage to dynamic data (such as part prices) contained in separate relational databases. Attributes are flexible, can be employed to add application-specific knowledge to models, and can also represent relationships between components within the same model or across models.

The Open Architecture of CADEX

CADEX brings the full power of an intelligent data integrator to Versions 4 and 5 of CADAM Drafting.

CADEX operates on all CADAM Drafting supported AIX and Windows environments.

CADEX provides a migration path for legacy PROFES-SIONAL CADAM, Mainframe CADAM, and LDX drawings, libraries, and applications.

CADEX applications are easily customized, and new applications can be developed by users or third parties.

CADEX interfaces with, and adds value to, enterprise-wide information management processes. IUE (Interactive User Exit) provides yet another method to extract CADEX intelligent data from the CADEX drawing and pass data to downstream processes and databases. Such access to the CADEX data provides virtually unlimited opportunities to leverage the CADEX data created. Data can also be managed and communicated to the enterprise in the most useful format.

CCD optionally offers a SMARTEAM interface. SMARTEAM provides the greater capability of managing all corporate data in a web-based collaborative PDM and e-Supply Chain solution.

Generate Reports Automatically

CADEX reports are generated automatically and accurately, with a minimum of operator effort. The CADEX report generator extracts intelligent attributes reliably associated to parts within standard libraries, and organizes that information based on hierarchical relationships defined between parts, assemblies, and schematics.

Reports are generated in standard formats or in formats defined locally to meet the needs of the group, project, or organization.

Typical reports generated through CADEX include: schematic from-to lists, bills of material, equipment lists, and assembly weight and price reports.

CONNECTION LIST

Harness	Wire Data	Ref Des From	Part No From	Pin Name From	From Shield	From Twist	From Coax
70552-01175-043							
	FAN-001A22A	CB541	MS14154-5	A2			
	FAN-002A22B	CB541	MS14154-5	B2			
	FAN-003A22C	CB541	MS14154-5	C2			
70552-01177-041							
		CBL258			CBL258		
		GD1024	GROUND	J			
		J192	D38999/20WD97 PN$S2831FM891 2-2	1	CBL258		
		J192	D38999/20WD97 PN$S2831FM891 2-2	2	CBL258		
		J192	D38999/20WD97 PN$S2831FM891 2-2	3	CBL258		
70552-02105-073							
		J129	MS3472W22-41P$S2834-2516-2	W	CBL243		

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www.3ds.com
www.catia.ibm.com