

AccessionIndex: TCD-SCSS-V.20220825.005

Accession Date: 25-Aug-2022

Accession By: Dr.Brian Coghlan

Object name: Century Data Model 140 Floppy Disk Drive Interface Specifications

Vintage: c.1971

Synopsis: Specifications for connecting the drive to external hardware.

**Description:**

Century Data Systems Incorporated appears to be a defunct company from Ohio, USA. This document is principally of interest as an example of the interface specifications of generic 8-inch floppy disk drives.

The homepage for this catalog is at: <https://www.scss.tcd.ie/SCSSTreasuresCatalog/>  
Click '*Accession Index*' (1st column listed) for related folder, or '*About*' for further guidance.  
Some of the items below may be more properly part of other categories of this catalog, but are listed here for convenience.

Accession Index	Object with Identification
<a href="#">TCD-SCSS-V.20220825.005</a>	Century Data Model 140 Floppy Disk Drive Interface Specifications. Specifications for connecting the drive to external hardware. 1971.
<a href="#">TCD-SCSS-T.20141115.002</a>	Tandon TM848-2 Double-Sided 8-inch Floppy Disk Drive. P/N: TM848-2 210101-002, S/N: 8 14 00002797, Made in USA. Controller assembly 210094-000 Rev 0.1. 1981.
	.

**References:**


1. Wikipedia, *History of the floppy disk*, see:  
[https://en.wikipedia.org/wiki/History\\_of\\_the\\_floppy\\_disk](https://en.wikipedia.org/wiki/History_of_the_floppy_disk)  
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REV	DESCRIPTION	DATE	APPROVED
A	ORIGINAL ISSUE		
B	REWRITTEN		
B1	REVISED		

2.1	PI PIN ASSIGNMENTS		
2.2	INTERFACE SIGNAL REQUIREMENTS		
2.2.1	INPUT SIGNALS		
2.2.2	OUTPUT SIGNALS		
2.4	CENTURY DATA MODEL 140 FLOPPY DISK DRIVE		
2.4.1	INTERFACE SPECIFICATIONS		
2.4.2	DRIVERS		
2.5	DC/SIGNAL CABLE PHYSICAL REQUIREMENTS		
2.5.1	DAISY CHAINED INTERFACE WIRING		
2.5.2	RADIAL INTERFACE WIRING		
2.6	INTERFACE TIMING		
2.6.1	TRACK POSITIONING		
2.6.2	READ DATA TIMING		
2.6.3	WRITE DATA TIMING		
3.0	140 140 DATA FORMAT		
4.0	POWER SEQUENCING		
4.1	POWER-ON AND AIR FLOW		
4.2	POWER-ON AND AIR FLOW		
5.0	PHYSICAL JACKS		
6.0	OPERATOR CONTROL		
7.0	POWER REQUIREMENTS		
8.0	AC POWER		
8.1	DC POWER		

 <b>Century Data</b> SYSTEMS, INC.	TITLE: SPECIFICATION, INTERFACE, MODEL 140		DRAWING NO. 11651-001	REV B1
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## 1.0 SCOPE

This specification has been prepared to meet the needs of the Original Equipment Manufacturer (OEM) who intends to use the Model 140 Floppy Disk Drive as a component in his data storage system. This document describes detailed interface information required by the equipment designer.

## 2.0 RELATED DOCUMENTS

Model 140 Disk Drive Installation and Parts Manual.  
Model 140 Disk Drive Operation and Maintenance Manual.  
Century Data Packing and Shipping Specification.

## 3.0 GENERAL DESCRIPTION

The Century Data Model 140 Floppy Disk Drive is a third generation, high speed, random access, disk storage unit which utilizes a flexible disk cartridge as the storage medium. Up to 3.20 million bits of data may be stored on the single recording surface of the flexible disk. When utilizing the IBM 3740 data format, 1.94 million bits of data may be recorded. The Model 140 Floppy Disk Drive features 48 tracks-per-inch and 3200 bits-per-inch technologies to provide media interchangeability with the IBM 3740 series of data recording equipment.

Access time is 6 milliseconds track to track with 10 milliseconds required after the final step for head stabilization. The flexible disk is rotated at 360 RPM yielding a data transfer rate of 250,000 bits-per-second.

The Model 140 contains features and options whereby a systems designer may incorporate the Model 140 into his data storage system with a minimum of effort. Among these are a positive pressurized media chamber, precise media registration, write protect capability, sector outputs, and a choice of data outputs.

## 4.0 RELIABILITY

### 4.1 Service Life

The Model 140 Floppy Disk Drive is designed and constructed to provide a useful life of 7 years or 35,000 hours, whichever occurs first, before a factory overhaul or replacement is required. Repair or replacement of parts will be permitted during the lifetime of the unit.

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