# QC DEVELOPMENT STANDARD

QIC-123 Revision D 01 Sep 94

REGISTRY OF DATA ALGORITHM IDENTIFIERS FOR 1/4-INCH CARTRIDGE TAPE DRIVES

Quarter-Inch Cartridge Drive Standards, Inc. 311 East Carrillo Street Santa Barbara, California 93101 Telephone (805) 963-3853 Fax (805) 962-1541 www.qic.org

#### **Important Notices**

This document is a development standard adopted by Quarter-Inch Cartridge Drive Standards, Inc. (QIC). This document may be revised several times during the development cycle. It is intended solely as a guide for companies interested in developing products which can be compatible with other products developed using this document. QIC makes no representation or warranty regarding this document, and any company using this document shall do so at its sole risk, including specifically the risks that a product developed will not be compatible with any other product or that any particular performance will not be achieved. QIC shall not be liable for any exemplary, incidental, proximate or consequential damages or expenses arising from the use of this document. This development standard defines only one approach to the product. Other approaches may be available in the industry.

This development standard is an authorized and approved publication of QIC. The underlying information and materials contained herein are the exclusive property of QIC but may be referred to and utilized by the general public for any legitimate purpose, particularly in the design and development of quarter-inch tape cartridge drive subsystems. This development standard may be copied in whole or in part *provided* that no revisions, alterations or changes of any kind are made to the materials contained herein. Only QIC has the right and authority to revise or change the material contained in this development standard, and any revisions by any party other than QIC are totally unauthorized and specifically prohibited.

Compliance with this development standard may require use of one or more features covered by proprietary rights (such as features which are the subject of a patent, patent application, copyright, mask work right or trade secret right). By publication of this development standard, no position is taken by QIC with respect to the validity or infringement of any patent or other proprietary right, whether owned by a Member or Associate of QIC, or otherwise. QIC hereby expressly disclaims any liability for infringement of intellectual property rights of others by virtue of the use of this development standard. QIC has not and does not investigate any notices or allegations of infringement prompted by publication of any QIC development standard, nor does QIC undertake a duty to advise users or potential users of QIC development standards of such notices or allegations. QIC hereby expressly advises all users or potential users of this development standard to investigate and analyze any potential infringement situation, seek the advice of intellectual property counsel, and, if indicated, obtain a license under any applicable intellectual property right or take the necessary steps to avoid infringement of any intellectual property right. QIC expressly disclaims any intent to promote infringement of any intellectual property right by virtue of the evolution, adoption, or publication of any QIC development standard.

## TABLE OF CONTENTS

1.0	OVERVIEW	1
2.0	REQUIREMENTS	1
3.0	DEFINITIONS	1
4.0	REGISTRY	2

#### 1.0 OVERVIEW

This document serves as a registry of data algorithm identifiers for quarter-inch cartridge tape formats. The purpose of data algorithm identifiers is to identify data compression and/or data encryption algorithms so that data interchange can be facilitated. Data algorithms are a third layer where unrecorded media is the first layer and format is the second layer. The registry shall be maintained by the QIC Facilitator.

### 2.0 REQUIREMENTS

Data algorithm identifiers shall be assigned to QIC development standards for such algorithms.

When a data algorithm development standard is approved, the QIC Facilitator shall assign an available identifier. An identifier is considered not available if it is currently assigned. Should no identifiers be available, the QIC technical committee shall review current assignments of identifiers for possible re-assignment, and, if none are found, continue the registry as an extension to the reserved identifier.

#### 3.0 DEFINITIONS

**Algorithm**—a technique used to transform data from one form to another and back to the original form.

**Third layer**—part of the overall data recording model where the first layer is the unrecorded media, the second layer is the recording format, and the third layer is any algorithm used to modify the data to be recorded prior to formatting.

**Identifier**—a unique 6-bit code as defined in QIC-121 and assigned to each algorithm to distinguish it from all the other algorithms. This code is placed in the predefined area within the format to allow the hardware to determine which algorithm was used to write the data on the media.

#### 4.0 REGISTRY

The register shall contain the following data: name of data algorithm development standard, date adopted, identifier assigned.

#### REGISTRY OF DATA ALGORITHM IDENTIFIERS FOR QUARTER-INCH CARTRIDGE TAPE DRIVES

DATA ALGORITHM DEVELOPMENT STANDARD	ADOPTED	IDENTIFIER
RESERVED		000000
QIC-122	18 OCT 89	000001
QIC-130	16 APR 91	000010
QIC-154 (512 Byte History Buffer)	10 MAR 94	000011
QIC-154 (1024 Byte History Buffer)	10 MAR 94	000100
QIC-154 (2048 Byte History Buffer)	10 MAR 94	000101
		000110
		000111
		001000
		001001
		001010
		001011
		001100
		001101
		001110
		001111
		010000
		010001
		010010
		010011
	_	010100
	_	010101
		010110

#### **REGISTRY OF DATA ALGORITHM IDENTIFIERS FOR QUARTER-INCH CARTRIDGE TAPE DRIVES**

DATA ALGORITHM DEVELOPMENT STANDARD	ADOPTED	<u>IDENTIFIER</u>
		010111
		011000
		011001
		011010
		011011
		011100
		011101
		011110
		011111
		100000
		100001
		100010
		100011
		100100
		100101
		100110
		100111
		101000
		101001
		101010
		101011
	_	101100

#### **REGISTRY OF DATA ALGORITHM IDENTIFIERS FOR QUARTER-INCH CARTRIDGE TAPE DRIVES**

DATA ALGORITHM DEVELOPMENT STANDARD	ADOPTED	<b>IDENTIFIER</b>
		101101
		101110
		101111
		110000
		110001
		110010
		110011
		110100
		110101
		110110
		110111
		111000
		111001
		111010
		111011
		111100
		111101
		111110
VENDOR UNIQUE	_	111111