

## WAVE and AVI Codec Registries

### Status of this Memo

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### Abstract

Internet applications may reference specific codecs within the WAVE and AVI registries as follows:

- \* video/vnd.avi; codec=XXX identifies a specific video codec (i.e., XXX) within the AVI Registry.
- \* audio/vnd.wave; codec=YYY identifies a specific audio codec (i.e., YYY) within the WAVE Registry.

Appendix A and Appendix B provides an authoritative reference for the interpretation of the required "codec" parameter. That is, the current set of audio codecs that are registered within the WAVE Registry are enumerated in Appendix A. Appendix B enumerates the current set of video codecs that have been registered to date within the AVI Registry.

## 1 Introduction

Internet-oriented multimedia applications reference multimedia content via predefined mechanisms (e.g., [2]). In the general case, this content was created primarily for the use of these Internet-oriented applications. Unfortunately, this Internet-oriented multimedia content represents a small minority of the total amount of multimedia content that has been created to date.

For this reason, a growing interest is forming in establishing mechanisms by which the repertoire of multimedia content available to Internet-oriented applications (e.g., for RTSP [3]) may be greatly extended to include multimedia content that has been created outside of distinctly Internet contexts. For this to occur, a mechanism must

be created for Internet protocols (e.g., [1], [3], [4]) to be able to identify the codecs by which this so-called "traditional" multimedia content has been encoded.

Unfortunately, several distinct encoding systems exist for traditional multimedia content. Each system has its own registry to ensure unique and stable codec identifications within that system. Perhaps the best known of these registries are Microsoft (for WAVE and AVI content) and Apple (for QuickTime content).

The purpose of this paper is to establish a mechanism by which codecs registered within Microsoft's WAVE and AVI Registries may be referenced within the IANA Namespace by Internet applications.

## 2 References to Registries within the IANA Vendor Tree

Reference [7] specifies that the IANA Namespace encompasses several trees. Discussions within the IETF-Types mailing list concluded that the most appropriate tree in which to reference codecs, which had already been registered by non-IANA Registries, is the Vendor Tree.

As a result, the non-IANA registry is identified within the IANA Vendor tree by vnd.RegistryName. A specific codec, which has been registered within that registry, is identified by a required codec parameter as specified by Section 2.2.3 of [7].

## 3 WAVE and AVI Registries

Both the WAVE and AVI Registries are historic databases that have been maintained by Microsoft as a free service. The Registries sought to assist developers of WAVE and AVI content and to standardize WAVE and AVI content by

- 1) avoiding conflict and/or duplication with current definitions, and
- 2) providing the registered information in a standard document and format that is publicly available.

The historic nature of these databases implies that unless the original registrants informed the registrar of a change of status (e.g., company acquired, new contact, new location, new phone), the contact information has generally not been updated from the originally registered values.

Audio codecs within the WAVE Registry are identified by WAVE Format IDs. The (audio) WAVE Format ID is officially known as "WAVE form Registration Number". The WAVE Format ID is a hexadecimal integer value. These codecs may be referenced within the IANA namespace as

"audio/vnd.wave; codec=XXX", where XXX represents a valid WAVE Format ID (e.g., the WAVE Format ID of "123" is referenced within the IANA namespace by "audio/vnd.wave; codec=123").

Video codecs within the AVI Registry are identified by AVI Codec IDs. The AVI Codec ID value is a FourCC encoding. A FourCC is 32-bits long and represents a (case-sensitive) four-character (i.e., ASCII) code value. These codecs may be referenced within the IANA namespace as "video/vnd.avi; codec=XXX", where XXX represents a valid AVI Codec ID (e.g., the WAVE Format ID of "SCRN" is referenced within the IANA namespace by "video/vnd.avi; codec=SCRN").

Appendix A is an authoritative list of the complete set of audio codecs that have been registered (as of January 1998) within the WAVE Registry. Appendix B is an authoritative list of the complete set of video codecs that have been registered (as of January 1998) within the AVI registry.

#### 4 Mapping Codec IDs to GUID Values

Direct mappings exist between WAVE Format IDs and GUIDs and between FourCC codec values and GUIDs [5]. [Note: GUIDs are Globally Unique Identifiers that are also known as Universally Unique Identifiers (UUIDs). UUIDs have been standardized within the Open Software Foundation's (OSF) Distributed Computing Environment (DCE).] These mappings enable GUID-oriented software to directly refer to these historic codec values. For example, the Advanced Streaming Format (ASF) [6] uses GUID values to refer to codecs, and the following mechanism is used to convert the historic WAVE and AVI codec values into the appropriate GUID value for use within ASF.

WAVE Format IDs are converted to GUIDs by inserting the hexadecimal value of the WAVE Format ID into the XXXXXXXX part of the following template: {XXXXXXXX-0000-0010-8000-00AA00389B71}. For example, a WAVE Format ID of 123 has the GUID value of {00000123-0000-0010-8000-00AA00389B71}.

FourCC values are converted to GUIDs by inserting the FourCC value into the XXXXXXXX part of the same template: {XXXXXXXX-0000-0010-8000-00AA00389B71}. For example, a conversion of the FourCC value of "H260" would result in the GUID value of {30363248-0000-0010-8000-00AA00389B71}. [Note: the 32-bit FourCC value of "H260" is converted into hexadecimal 32-bit value (i.e., 30363248) because the initial XXXXXXXX of the GUID is defined as a DWORD and thus takes a 32-bit hexadecimal value. Endian considerations account for the apparent re-ordering of the original ASCII text.]

## 5 Security Considerations

This document merely registers a set of formats. It does nothing to address the security considerations of these formats. The format itself must be investigated for security issues with each format.

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Subsequent to this submittal the author has changed employers. He now can be reached at:

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## References

- [1] Schulzrinne, H., Casner, S., Frederick, R., and V. Jacobson, "RTP: A Transport Protocol for Real-Time Applications", RFC 1889, January 1996.
- [2] Schulzrinne, H., "RTP Profile for Audio and Video Conferences with Minimal Control", RFC 1890, January 1996.
- [3] Schulzrinne, H., Rao, A., and R. Lanphier, "Real Time Streaming Protocol (RTSP)", RFC 2326, April 1998.
- [4] Handley, M., and V. Jacobson, "SDP: Session Description Protocol", RFC 2327, April 1998.
- [5] "ASF Codec GUIDs", <http://www.microsoft.com/asf/guids.htm>
- [6] Microsoft Corporation, "Advanced Streaming Format (ASF) Specification", September 1997, <http://www.microsoft.com/asf/specs.htm>.
- [7] Freed, N., Klensin, J., and J. Postel, "Multipurpose Internet Mail Extensions (MIME) Part Four: Registration Procedures", RFC 2048, November 1996.

## Appendix A Audio Codecs from the Microsoft WAVE Registry

## A.1 Microsoft Unknown Wave Format

WAVE form Registration Number (hex): 0x0000  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=0  
WAVE form wFormatTag ID: WAVE\_FORMAT\_UNKNOWN  
Contact:  
Terri Hendry, 425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

## A.2 Microsoft PCM Format

WAVE form Registration Number (hex): 0x0001  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=1  
WAVE form wFormatTag ID: WAVE\_FORMAT\_PCM  
Contact:  
Terri Hendry  
425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

## A.3 Microsoft ADPCM Format

WAVE form Registration Number (hex): 0x0002  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=2  
WAVE form wFormatTag ID: WAVE\_FORMAT\_ADPCM  
Contact:  
Terri Hendry  
425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

## A.4 IEEE Float

WAVE form Registration Number (hex): 0x0003  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=3  
WAVE form wFormatTag ID: WAVE\_FORMAT\_IEEE\_FLOAT  
Contact:  
Terri Hendry  
425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

## A.5 Compaq Computer's VSELP

WAVE form Registration Number (hex): 0x0004  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=4  
WAVE form wFormatTag ID: WAVE\_FORMAT\_VSELP  
Additional information: VSELP codec for Windows CE 2.0 devices  
Contact:  
Doug Stewart  
713-374-7925  
Compaq Computer Corporation  
20555 SH 249  
Houston, TX 77269-2000 USA

## A.6 IBM CVSD

WAVE form Registration Number (hex): 0x0005  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=5  
WAVE form wFormatTag ID: WAVE\_FORMAT\_IBM\_CVSD  
Contact:  
IBM Corporation

## A.7 Microsoft ALAW

WAVE form Registration Number (hex): 0x0006  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=6  
WAVE form wFormatTag ID: WAVE\_FORMAT\_ALAW  
Contact:  
Terri Hendry  
425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

## A.8 Microsoft MULAW

WAVE form Registration Number (hex): 0x0007  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=7  
WAVE form wFormatTag ID: WAVE\_FORMAT\_MULAW  
Contact:  
Terri Hendry  
425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

## A.9 OKI ADPCM

WAVE form Registration Number (hex): 0x0010  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=10  
WAVE form wFormatTag ID: WAVE\_FORMAT\_OKI\_ADPCM  
Contact:  
Oki

## A.10 Intel's DVI ADPCM

WAVE form Registration Number (hex): 0x0011  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=11  
WAVE form wFormatTag ID: WAVE\_FORMAT\_DVI\_ADPCM  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, OR 97124  
503-696-2448

## A.11 Videologic's MediaSpace ADPCM

WAVE form Registration Number (hex): 0x0012  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=12  
WAVE form wFormatTag ID: WAVE\_FORMAT\_MEDIASPACE\_ADPCM  
Contact:  
Videologic  
Home Park Estate  
Kings Langley England WD4 8LZ  
Telephone: 44-92-326-0511

## A.12 Sierra ADPCM

WAVE form Registration Number (hex): 0x0013  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=13  
WAVE form wFormatTag ID: WAVE\_FORMAT\_SIERRA\_ADPCM  
Contact:  
Stuart Goldstein  
72170.301@compuserve.com  
Sierra Semiconductor Corp  
2075 North Capitol Avenue  
San Jose, California 95132 USA  
408-263-9300

## A.13 G.723 ADPCM

WAVE form Registration Number (hex): 0x0014  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=14  
WAVE form wFormatTag ID: WAVE\_FORMAT\_G723\_ADPCM  
Contact:  
Bob Bauman  
310-532-3092  
Antex Electronics Coporation  
3184-H Airway Ave.  
Costa Mesa, California 92627 USA

## A.14 DSP Solution's DIGISTD

WAVE form Registration Number (hex): 0x0015  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=15  
WAVE form wFormatTag ID: WAVE\_FORMAT\_DIGISTD  
Contact:  
DSP Solutions, Inc  
2464 Embarcadero Way  
Palo Alto, California 94303 USA  
415-494-8086

## A.15 DSP Solution's DIGIFIX

WAVE form Registration Number (hex): 0x0016  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=16  
WAVE form wFormatTag ID: WAVE\_FORMAT\_DIGIFIX  
Contact:  
DSP Solutions, Inc  
2464 Embarcadero Way  
Palo Alto, California 94303 USA  
415-494-8086

## A.16 Dialogic OKI ADPCM

WAVE form Registration Number (hex): 0x0017  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=17  
WAVE form wFormatTag ID: WAVE\_FORMAT\_DIALOGIC\_OKI\_ADPCM  
WAVEFORMAT use: for OKI ADPCM chips or firmware  
Contact:  
Dialogic Corporation  
300 Littleton Road  
Parsippany, NJ 07054 USA  
201-334-1268

## A.17 MediaVision ADPCM

WAVE form Registration Number (hex): 0x0018  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=18  
WAVE form wFormatTag ID: WAVE\_FORMAT\_MEDIASPEECH  
WAVEFORMAT Name: ADPCM for Jazz 16 chip set  
Contact:  
Alex Cheng  
Media Vision, Inc  
California USA

## A.18 HP CU

WAVE form Registration Number (hex): 0x0019  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=19  
WAVE form wFormatTag ID: WAVE\_FORMAT\_HP\_CU  
Contact:  
Cliff Chiang  
Telephone: 65-3747005  
Hewlett-Packard Company  
452 Alexandra Road  
Singapore 119961 Singapore

## A.19 Yamaha ADPCM

WAVE form Registration Number (hex): 0x0020  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=20  
WAVE form wFormatTag ID: WAVE\_FORMAT\_YAMAHA\_ADPCM  
Contact:  
Yamaha Corporation of America  
Systems Technology Division  
981 Ridder Park Drive  
San Jose, California 95131 USA  
408-437-3133

## A.20 Speech Compression's Sonarc

WAVE form Registration Number (hex): 0x0021  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=21  
WAVE form wFormatTag ID: WAVE\_FORMAT\_SONARC  
Contact:  
Speech Compression

## A.21 DSP Group's True Speech

WAVE form Registration Number (hex): 0x0022  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=22  
WAVE form wFormatTag ID: WAVE\_FORMAT\_DSPGROUP\_TRUESPEECH  
Contact:  
DSP Group, Inc  
2464 Embarcadero Way  
Palo Alto, California 94303 USA  
415-494-8086

## A.22 Echo Speech's EchoSC1

WAVE form Registration Number (hex): 0x0023  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=23  
WAVE form wFormatTag ID: WAVE\_FORMAT\_ECHOSC1  
Contact:  
Billy Brackenridge  
billy@isi.edu  
Echo Speech Corporation  
6460 Via Real  
Carpinteria, California 93013 USA  
805-684-4593

## A.23 Audiofile AF36

WAVE form Registration Number (hex): 0x0024  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=24  
WAVE form wFormatTag ID: WAVE\_FORMAT\_AUDIOFILE\_AF36  
Contact:  
Alan Miller  
617-271-0900  
Virtual Music, Inc.  
19 Crosby Drive  
Bedford, MA 01730-1419 USA

## A.24 APTX

WAVE form Registration Number (hex): 0x0025  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=25  
WAVE form wFormatTag ID: WAVE\_FORMAT\_APTX  
Contact:  
Calypso Software  
Audio Processing Technology  
Edgewater Road  
Belfast, Northern Ireland  
44-232-371110

## A.25      AudioFile AF10

WAVE form Registration Number (hex):      0x0026  
Codec ID in the IANA Namespace:      audio/vnd.wave;codec=26  
WAVE form wFormatTag ID:      WAVE\_FORMAT\_AUDIOFILE\_AF10  
Contact:  
Alan Miller  
617-271-0900  
Virtual Music, Inc.  
19 Crosby Drive  
Bedford, MA 01730-1419 USA

## A.26      Prosody 1612

WAVE form Registration Number (hex):      0x0027  
Codec ID in the IANA Namespace:      audio/vnd.wave;codec=27  
WAVE form wFormatTag ID:      WAVE\_FORMAT\_PROSODY\_1612  
Additional Information:      Prosody CTI Speech Card  
Contact:  
Phil Cambridge  
Phil.Cambridge@aculab.com  
Aculab plc  
Lakeside, Bramley Road  
Mount Farm, Milton Keynes MK1 1PT UK  
+44 1908 273800

## A.27      LRC

WAVE form Registration Number (hex):      0x0028  
Codec ID in the IANA Namespace:      audio/vnd.wave;codec=28  
WAVE form wFormatTag ID:      WAVE\_FORMAT\_LRC  
Contact:  
Patrick Wassmer  
pwassmer@merging.com  
+41 21 931 50 11  
Merging Technologies S.A.  
Le Verney, E  
Puidoux, Switzerland CH-1604

## A.28      Dolby AC2

WAVE form Registration Number (hex):      0x0030  
Codec ID in the IANA Namespace:      audio/vnd.wave;codec=30  
WAVE form wFormatTag ID:      WAVE\_FORMAT\_DOLBY\_AC2  
Contact:  
Dolby Laboratories  
100 Portrero Avenue  
San Francisco, California 94103-4813 USA  
415-558-0200

## A.29      GSM610

WAVE form Registration Number (hex):      0x0031  
Codec ID in the IANA Namespace:      audio/vnd.wave;codec=31  
WAVE form wFormatTag ID:      WAVE\_FORMAT\_GSM610  
Contact:  
Terri Hendry, 425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

## A.30      MSNAudio

WAVE form Registration Number (hex):      0x0032  
Codec ID in the IANA Namespace:      audio/vnd.wave;codec=32  
WAVE form wFormatTag ID:      WAVE\_FORMAT\_MSNAUDIO  
WAVEFORMAT Name:      Microsoft MSN Audio Codec  
Contact:  
Terri Hendry, 425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

## A.31      Antex ADPCME

WAVE form Registration Number (hex):      0x0033  
Codec ID in the IANA Namespace:      audio/vnd.wave;codec=33  
WAVE form wFormatTag ID:      WAVE\_FORMAT\_ATEX\_ADPCME  
Contact:  
Bob Bauman  
Antex Electronics Corporation  
3184-H Airway Ave.  
Costa Mesa, California 92627 USA  
310-532-3092

## A.32 Control Res VQLPC

WAVE form Registration Number (hex): 0x0034  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=34  
WAVE form wFormatTag ID: WAVE\_FORMAT\_CONTROL\_RES\_VQLPC  
Contact:  
Charles Larson  
Control Resources Limited  
PO Box 8694  
Roland Heights, California 91748 USA  
818-912-5722

## A.33 Digireal

WAVE form Registration Number (hex): 0x0035  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=35  
WAVE form wFormatTag ID: WAVE\_FORMAT\_DIGIREAL  
Contact:  
DSP Solutions, Inc  
2464 Embarcadero Way  
Palo Alto, California 94303 USA  
415-494-8086

## A.34 DigiADPCM

WAVE form Registration Number (hex): 0x0036  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=36  
WAVE form wFormatTag ID: WAVE\_FORMAT\_DIGIADPCM  
Contact:  
DSP Solutions, Inc  
2464 Embarcadero Way  
Palo Alto, California 94303 USA  
415-494-8086

## A.35 Control Res CR10

WAVE form Registration Number (hex): 0x0037  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=37  
WAVE form wFormatTag ID: WAVE\_FORMAT\_CONTROL\_RES\_CR10  
Contact:  
Charles Larson  
Control Resources Limited  
PO Box 8694  
Roland Heights, California 91748 USA  
818-912-5722

## A.36 NMS VBXADPCM

WAVE form Registration Number (hex): 0x0038  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=38  
WAVE form wFormatTag ID: WAVE\_FORMAT\_NMS\_VBXADPCM  
Contact:  
Joel Feldman, Steve Mors  
Natural MicroSystems

## A.37 Roland RDAC

WAVE form Registration Number (hex): 0x0039  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=39  
WAVE form wFormatTag ID: WAVE\_FORMAT\_ROLAND\_RDAC  
WAVEFORMAT Name: Roland RDAC Proprietary format  
Contact:  
Takera Tanigawa  
email: tanigawa@roland.co.jp  
001-81-6-682-4584

## A.38 EchoSC3

WAVE form Registration Number (hex): 0x003A  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=3A  
WAVE form wFormatTag ID: WAVE\_FORMAT\_ECHOSC3  
WAVEFORMAT Description: Proprietary compressed format  
Contact:  
Billy Brackenridge  
billy@isi.edu  
Echo Speech Corporation  
6460 Via Real  
Carpinteria, California 93013 USA  
805-684-4593

## A.39 Rockwell ADPCM

WAVE form Registration Number (hex): 0x003B  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=3B  
WAVE form wFormatTag ID: WAVE\_FORMAT\_ROCKWELL\_ADPCM  
WAVEFORMAT Name: Rockwell ADPCM  
Contact:  
Rockwell International  
Digital Communications Division  
4311 Jamboree Rd.  
PO Box C  
Newport Beach, California 92658-8902 USA  
714-833-4600

## A.40 Rockwell Digit LK

WAVE form Registration Number (hex): 0x003C  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=3C  
WAVE form wFormatTag ID: WAVE\_FORMAT\_ROCKWELL\_DIGITALK  
WAVEFORMAT Name: Rockwell DIGITALK  
Contact:  
Rockwell International  
Digital Communications Division  
4311 Jamboree Rd.  
PO Box C  
Newport Beach, California 92658-8902 USA  
714-833-4600

## A.41 Xebec

WAVE form Registration Number (hex): 0x003D  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=  
WAVE form wFormatTag ID: WAVE\_FORMAT\_XEBEC  
Additional Information: proprietary compression  
Contact:  
David Emberton  
44-453-835482  
Xebec Multimedia Solutions Limited  
Smith House  
1-3 George Street  
Nailsworth, Gloucestershire, England GL6 0AG

## A.42 Antex Electronics G.721

WAVE form Registration Number (hex): 0x0040  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=40  
WAVE form wFormatTag ID: WAVE\_FORMAT\_G721\_ADPCM  
Contact:  
Bob Bauman  
310-532-3092  
Antex Electronics Coporation  
3184-H Airway Ave.  
Costa Mesa, California 92627 USA

## A.43 G.728 CELP

WAVE form Registration Number (hex): 0x0041  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=41  
WAVE form wFormatTag ID: WAVE\_FORMAT\_G728\_CELP  
Contact:  
Bob Bauman  
310-532-3092  
Antex Electronics Coporation  
3184-H Airway Ave.  
Costa Mesa, California 92627 USA

## A.44 MSG723

WAVE form Registration Number (hex): 0x0042  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=42  
WAVE form wFormatTag ID: WAVE\_FORMAT\_MSG723  
Contact:  
Terri Hendry, 425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

## A.45 MPEG

WAVE form Registration Number (hex): 0x0050  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=50  
WAVE form wFormatTag ID: WAVE\_FORMAT\_MPEG  
Contact:  
Terri Hendry, 425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

## A.46 RT24

WAVE form Registration Number (hex): 0x0052  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=52  
WAVE form wFormatTag ID: WAVE\_FORMAT\_RT24  
Additional Information: This ACM codec is an alternative codec ID to refer to the Voxware Metavoice codec (Codec ID 0x0074). Only the Voxware reference should be used in the general case.  
Contact:  
Alexander V. Sokolsky  
717-730-9501  
InSoft, Inc.  
4718 Old Gettysburg Rd  
Suite 307  
Mechanicsburg, PA 17055-4378 USA

## A.47 PAC

WAVE form Registration Number (hex): 0x0053  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=53  
WAVE form wFormatTag ID: WAVE\_FORMAT\_PAC  
Contact:  
Alexander V. Sokolsky  
717-730-9501  
InSoft, Inc.  
4718 Old Gettysburg Rd  
Suite 307  
Mechanicsburg, PA 17055-4378 USA

## A.48 MPEG Layer 3

WAVE form Registration Number (hex): 0x0055  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=55  
WAVE form wFormatTag ID: WAVE\_FORMAT\_MPEGLAYER3  
Additional Information: ISO/MPEG Layer3 Format Tag  
Contact:  
Tomislav Gracanac  
(408) 576-1361  
AT&T Labs, Inc.  
2665 North First Street  
San Jose, California 95134 USA

## A.49      Lucent G.723

WAVE form Registration Number (hex):      0x0059  
Codec ID in the IANA Namespace:      audio/vnd.wave;codec=59  
WAVE form wFormatTag ID:      WAVE\_FORMAT\_LUCENT\_G723  
Contact:  
Ray Jones  
(raykj@lucent.com)  
Lucent Technologies

## A.50      Cirrus

WAVE form Registration Number (hex):      0x0060  
Codec ID in the IANA Namespace:      audio/vnd.wave;codec=60  
WAVE form wFormatTag ID:      WAVE\_FORMAT\_CIRRUS  
Contact:  
Mr Scott MacDonald  
512 442-7555  
Cirrus Logic (USA)

## A.51      ESPCM

WAVE form Registration Number (hex):      0x0061  
Codec ID in the IANA Namespace:      audio/vnd.wave;codec=61  
WAVE form wFormatTag ID:      WAVE\_FORMAT\_ESPCM  
Contact:  
Paul Sung  
510-226-1088  
ESS Technology  
46107 Landing Parkway  
Fremont, California 94538 USA

## A.52      Voxware

WAVE form Registration Number (hex):      0x0062  
Codec ID in the IANA Namespace:      audio/vnd.wave;codec=62  
WAVE form wFormatTag ID:      WAVE\_FORMAT\_VOXWARE  
Additional Information:      This format is now obsolete  
Contact:  
Lee Stewart  
rover@pipeline.com or compuserve 75570,3525 or lees@voxware.com  
Voxware Inc  
172 Tamarack Circle  
Skillman, NJ 08558 USA

## A.53 Canopus Atrac

WAVE form Registration Number (hex): 0x0063  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=63  
WAVE form wFormatTag ID: WAVE\_FORMAT\_CANOPUS\_ATRAC  
Additional Information: ATRACWAVEFORMAT  
Contact:  
Masayoshi Araki  
m-araki@canopus.co.jp  
81-78-992-7812  
Canopus, Co., Ltd.  
Kobe Hi-Tech Park  
1-2-2 Murotani, Nishi-ku  
Kobe, Hyogo 651-22 Japan

## A.54 G.726 ADPCM

WAVE form Registration Number (hex): 0x0064  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=64  
WAVE form wFormatTag ID: WAVE\_FORMAT\_G726\_ADPCM  
Contact:  
Jean-Claude Anaya  
100433.3121@compuserve.com  
(33) 57-26-99-24  
APICOM  
218, Avenue du Haut-Leveque  
Pessac France 33605

## A.55 G.722 ADPCM

WAVE form Registration Number (hex): 0x0065  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=65  
WAVE form wFormatTag ID: WAVE\_FORMAT\_G722\_ADPCM  
Contact:  
Jean-Claude Anaya  
100433.3121@compuserve.com  
(33) 57-26-99-24  
APICOM  
218, Avenue du Haut-Leveque  
Pessac France 33605

## A.56 DSAT

WAVE form Registration Number (hex): 0x0066  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=66  
WAVE form wFormatTag ID: WAVE\_FORMAT\_DSAT  
Contact:  
Terri Hendry  
425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

## A.57 DSAT Display

WAVE form Registration Number (hex): 0x0067  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=67  
WAVE form wFormatTag ID: WAVE\_FORMAT\_DSAT\_DISPLAY  
Contact:  
Terri Hendry  
425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

## A.58 Voxware Byte Aligned

WAVE form Registration Number (hex): 0x0069  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=69  
WAVE form wFormatTag ID: WAVE\_FORMAT\_VOXWARE\_BYTE\_ALIGNED  
Additional Information: This format is now obsolete  
Contact:  
Lee Stewart  
rover@pipeline.com or compuserve 75570,3525 or lees@voxware.com  
Voxware Inc  
172 Tamarack Circle  
Skillman, NJ 08558 USA

## A.59 Voxware AC8

WAVE form Registration Number (hex): 0x0070  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=70  
WAVE form wFormatTag ID: WAVE\_FORMAT\_VOXWARE\_AC8  
Additional Information: This format ID is now obsolete  
Contact:  
Lee Stewart  
lees@voxware.com  
Voxware Inc.  
172 Tamarack Circle  
Skillman, NJ 08558 USA

## A.60 Voxware AC10

WAVE form Registration Number (hex): 0x0071  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=71  
WAVE form wFormatTag ID: WAVE\_FORMAT\_VOXWARE\_AC10  
Additional Information: This format ID is now obsolete  
Contact:  
Lee Stewart  
lees@voxware.com  
Voxware Inc.  
172 Tamarack Circle  
Skillman, NJ 08558 USA

## A.61 Voxware AC16

WAVE form Registration Number (hex): 0x0072  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=72  
WAVE form wFormatTag ID: WAVE\_FORMAT\_VOXWARE\_AC16  
Additional Information: This format ID is now obsolete  
Contact:  
Lee Stewart  
lees@voxware.com  
Voxware Inc.  
172 Tamarack Circle  
Skillman, NJ 08558 USA

## A.62 Voxware AC20

WAVE form Registration Number (hex): 0x0073  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=73  
WAVE form wFormatTag ID: WAVE\_FORMAT\_VOXWARE\_AC20  
Additional Information: This format ID is now obsolete  
Contact:  
Lee Stewart  
lees@voxware.com  
Voxware Inc.  
172 Tamarack Circle  
Skillman, NJ 08558 USA

## A.63 Voxware MetaVoice

WAVE form Registration Number (hex): 0x0074  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=74  
WAVE form wFormatTag ID: WAVE\_FORMAT\_VOXWARE\_RT24  
Additional Information: file and stream oriented  
Contact:  
Lee Stewart  
lees@voxware.com  
Voxware Inc.  
172 Tamarack Circle  
Skillman, NJ 08558 USA

## A.64 Voxware MetaSound

WAVE form Registration Number (hex): 0x0075  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=75  
WAVE form wFormatTag ID: WAVE\_FORMAT\_VOXWARE\_RT29  
Additional Information: file and stream oriented  
Contact:  
Lee Stewart  
lees@voxware.com  
Voxware Inc.  
172 Tamarack Circle  
Skillman, NJ 08558 USA

## A.65 Voxware RT29HW

WAVE form Registration Number (hex): 0x0076  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=76  
WAVE form wFormatTag ID: WAVE\_FORMAT\_VOXWARE\_RT29HW  
Additional Information: This format ID is now obsolete  
Contact:  
Lee Stewart  
lees@voxware.com  
Voxware Inc.  
172 Tamarack Circle  
Skillman, NJ 08558 USA

## A.66 Voxware VR12

WAVE form Registration Number (hex): 0x0077  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=77  
WAVE form wFormatTag ID: WAVE\_FORMAT\_VOXWARE\_VR12  
Additional Information: This format ID is now obsolete  
Contact:  
Lee Stewart  
lees@voxware.com  
Voxware Inc.  
172 Tamarack Circle  
Skillman, NJ 08558 USA

## A.67 Voxware VR18

WAVE form Registration Number (hex): 0x0078  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=78  
WAVE form wFormatTag ID: WAVE\_FORMAT\_VOXWARE\_VR18  
Additional Information: This format ID is now obsolete  
Contact:  
Lee Stewart  
lees@voxware.com  
Voxware Inc.  
172 Tamarack Circle  
Skillman, NJ 08558 USA

## A.68 Voxware TQ40

WAVE form Registration Number (hex): 0x0079  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=79  
WAVE form wFormatTag ID: WAVE\_FORMAT\_VOXWARE\_TQ40  
Additional Information: This format ID is now obsolete  
Contact:  
Lee Stewart  
lees@voxware.com  
Voxware Inc.  
172 Tamarack Circle  
Skillman, NJ 08558 USA

## A.69 Softsound

WAVE form Registration Number (hex): 0x0080  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=80  
WAVE form wFormatTag ID: WAVE\_FORMAT\_SOFTSOUND  
Contact:  
AJ Robinson  
44-1727-847949  
Softsound, Ltd.  
12 St. Stephens Avenue  
St. Albans, Herts, UK AL3 4AD

## A.70 Voxware TQ60

WAVE form Registration Number (hex): 0x0081  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=81  
WAVE form wFormatTag ID: WAVE\_FORMAT\_VOXWARE\_TQ60  
Additional Information: This format ID is now obsolete  
Contact:  
Lee Stewart  
lees@voxware.com  
Voxware Inc.  
172 Tamarack Circle  
Skillman, NJ 08558 USA

## A.71 MSRT24

WAVE form Registration Number (hex): 0x0082  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=82  
WAVE form wFormatTag ID: WAVE\_FORMAT\_MSRT24  
Additional Information: This ACM codec is an alternative codec ID to refer to the Voxware Metavoice codec (Codec ID 0x0074). Only the Voxware reference should be used in the general case.  
Contact:  
Terri Hendry  
425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

## A.72 G.729A

WAVE form Registration Number (hex): 0x0083  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=83  
WAVE form wFormatTag ID: WAVE\_FORMAT\_G729A  
Contact:  
AT&T Laboratories

## A.73 MVI MV12

WAVE form Registration Number (hex): 0x0084  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=84  
WAVE form wFormatTag ID: WAVE\_FORMAT\_MVI\_MV12  
Contact:  
David R. Whipple  
whipple@mail.webtek.com  
Motion Pixels  
7802 North 132 East Court  
Owasso, OK 74055 USA  
(918) 272-5328

## A.74 DF G.726

WAVE form Registration Number (hex): 0x0085  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=85  
WAVE form wFormatTag ID: WAVE\_FORMAT\_DF\_G726  
Contact:  
Jarno van Rooyen  
Jarno.VanRooyen@DataVoice.co.za  
DataFusion Systems (Pty) (Ltd)  
PO Box 582  
Stellenbosch Stellenbosch South Africa  
27 21 888 2000

## A.75 DF GSM610

WAVE form Registration Number (hex): 0x0086  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=86  
WAVE form wFormatTag ID: WAVE\_FORMAT\_DF\_GSM610  
Contact:  
Jarno van Rooyen  
Jarno.VanRooyen@DataVoice.co.za  
DataFusion Systems (Pty) (Ltd)  
PO Box 582  
Stellenbosch 7600 South Africa  
27 21 888 2000

## A.76 ISIAudio

WAVE form Registration Number (hex): 0x0088  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=88  
WAVE form wFormatTag ID: WAVE\_FORMAT\_ISIAUDIO  
Contact:  
Iterated Systems, Inc.  
5550-a Peachtree Parkway  
Suite 650  
Norcross, GA 30092 USA  
404-840-0633

## A.77 Onlive

WAVE form Registration Number (hex): 0x0089  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=89  
WAVE form wFormatTag ID: WAVE\_FORMAT\_ONLIVE  
Contact:  
Dr. Ajit L. Lalwani  
ajit@onlive.com  
(408) 617 - 3595  
OnLive! Technologies, Inc.  
1039 S. Mary Ave.  
Sunnyvale, California 94087 USA  
(408) 617-7000

## A.78 SBC24

WAVE form Registration Number (hex): 0x0091  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=91  
WAVE form wFormatTag ID: WAVE\_FORMAT\_SBC24  
Contact:  
Dieter Rencken  
Dieter.W.Rencken@siemenscom.com  
(408) 492-6539  
Siemens Business Communications Systems  
4900 Old Ironsides Drive  
Santa Clara, California 95054 USA  
(408) 492-2000

## A.79 Dolby AC3 SPDIF

WAVE form Registration Number (hex): 0x0092  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=92  
WAVE form wFormatTag ID: WAVE\_FORMAT\_DOLBY\_AC3\_SPDIF  
Contact:  
Monty Schmidt  
Sonic Foundry  
100 South Baldwin, Suite 204  
Madison, WI 53703 USA  
608-256-3133

## A.80 ZyXEL ADPCM

WAVE form Registration Number (hex): 0x0097  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=97  
WAVE form wFormatTag ID: WAVE\_FORMAT\_ZYXEL\_ADPCM  
Contact:  
Nasser Tarazi  
nasser@ZyXEL.COM  
714-693-0808 ext 206  
ZyXEL Communications, Inc.  
4920 E. La Palma Ave  
Anaheim, California 92807 USA  
714-693-0808

## A.81 Philips LPCBB

WAVE form Registration Number (hex): 0x0098  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=98  
WAVE form wFormatTag ID: WAVE\_FORMAT\_PHILIPS\_LPCBB  
Contact:  
Kurt Kornmuller  
Philips Speech Processing  
Computerstrasse 6  
Vienna A-1101 Austria  
43 1 601 01

## A.82 Packed

WAVE form Registration Number (hex): 0x0099  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=99  
WAVE form wFormatTag ID: WAVE\_FORMAT\_PACKED  
Contact:  
Alex Ruegg  
alex.ruegg@studer.ch  
41-1-870-1252  
Studer Professional Audio AG  
Althardstrasse 30  
Regensdorf, CH 8105  
41-1-870-7252

## A.83 Rhetorex ADPCM

WAVE form Registration Number (hex): 0x0100  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=100  
WAVE form wFormatTag ID: WAVE\_FORMAT\_RHETOREX\_ADPCM  
Contact:  
Roger Dang  
roger.dang@octel.com  
408-371-0881-x195  
Rhetorex, Inc.  
200 E Hacienda Ave  
Campbell, California 95008 USA

## A.84 BeCubed Software's IRAT

WAVE form Registration Number (hex): 0x0101  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=101  
WAVE form wFormatTag ID: WAVE\_FORMAT\_IRAT  
WAVEFORMAT name:  
Contact:  
William J. Locke  
bill@becubed.com  
BeCubed Software Inc.  
1750 Marietta Hwy STE 240  
Canton, GA 30114 USA  
770-720-1077

## A.85 Vivo G.723

WAVE form Registration Number (hex): 0x00111  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=111  
WAVE form wFormatTag ID: WAVE\_FORMAT\_VIVO\_G723  
Contact:  
Vivo Software  
411 Waverley Oaks Road, Suite 313  
Waltham, MA 02154 USA  
(617) 899-8900

## A.86 Vivo Siren

WAVE form Registration Number (hex): 0x0112  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=112  
WAVE form wFormatTag ID: WAVE\_FORMAT\_VIVO\_SIREN  
Contact:  
Vivo Software  
411 Waverley Oaks Road, Suite 313  
Waltham, MA 02154 USA  
(617) 899-8900

## A.87 Digital G.723

WAVE form Registration Number (hex): 0x0123  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=123  
WAVE form wFormatTag ID: WAVE\_FORMAT\_DIGITAL\_G723  
Contact:  
John Forecast  
forecast@shell.lkg.dec.com  
508-486-5264  
Digital Equipment Corporation  
146 Main Street  
Maynard, MA 01754-2571 USA  
1-800-DIGITAL

## A.88 Creative ADPCM

WAVE form Registration Number (hex): 0x0200  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=200  
WAVE form wFormatTag ID: WAVE\_FORMAT\_CREATIVE\_ADPCM  
Contact:  
Peter Ridge  
408-428-2366  
Creative Labs, Inc  
California, USA

## A.89 Creative FastSpeech8

WAVE form Registration Number (hex): 0x0202  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=202  
WAVE form wFormatTag ID: WAVE\_FORMAT\_CREATIVE\_FASTSPEECH8  
Contact:  
Peter Ridge  
408-428-2366  
Creative Labs, Inc  
California, USA

## A.90 Creative FastSpeech10

WAVE form Registration Number (hex): 0x0203  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=203  
WAVE form wFormatTag ID: WAVE\_FORMAT\_CREATIVE\_FASTSPEECH10  
Contact:  
Peter Ridge  
408-428-2366  
Creative Labs, Inc  
California, USA

## A.91 Quarterdeck

WAVE form Registration Number (hex): 0x0220  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=220  
WAVE form wFormatTag ID: WAVE\_FORMAT\_QUARTERDECK  
Contact:  
Eugene Olsen  
310-309-3700  
Quarterdeck Corporation  
13160 Mindanao Way FL 3  
Marina del Rey, California 90292-9705 USA

## A.92 FM Towns Snd

WAVE form Registration Number (hex): 0x0300  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=300  
WAVE form wFormatTag ID: WAVE\_FORMAT\_FM\_TOWNS\_SND  
Contact:  
Fujitsu Corporation

## A.93 BTV Digital

WAVE form Registration Number (hex): 0x0400  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=400  
WAVE form wFormatTag ID: WAVE\_FORMAT\_BTV\_DIGITAL  
Additional Information: Brooktree digital audio format  
Contact:  
Dave Wilson  
512-502-1725  
Brooktree Corporation  
9868 Scranton Road  
San Diego, California 92121-3707 USA  
1-800-228-2777

## A.94 VME VMPCM

WAVE form Registration Number (hex): 0x0680  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=680  
WAVE form wFormatTag ID: WAVE\_FORMAT\_VME\_VMPCM  
Contact:  
Tomislav Gracanac  
(408) 576-1361  
AT&T Labs, Inc.  
2665 North First Street  
San Jose, California 95134 USA

## A.95 OLIGSM

WAVE form Registration Number (hex): 0x1000  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=1000  
WAVE form wFormatTag ID: WAVE\_FORMAT\_OLIGSM  
Contact:  
Harry Sinn  
Ing C. Olivetti & C., S.p.A.  
Via G. Jervis 77  
Via Montalenghe 8 Scarmagno  
Ivrea (To) 10015 Italy  
39-125-527056

## A.96 OLIADPCM

WAVE form Registration Number (hex): 0x1001  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=1001  
WAVE form wFormatTag ID: WAVE\_FORMAT\_OLIADPCM  
Contact:  
Harry Sinn  
Ing C. Olivetti & C., S.p.A.  
Via G. Jervis 77  
Via Montalenghe 8 Scarmagno  
Ivrea (To) 10015 Italy  
39-125-527056

## A.97 OLICELP

WAVE form Registration Number (hex): 0x1002  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=1002  
WAVE form wFormatTag ID: WAVE\_FORMAT\_OLICELP  
Contact:  
Harry Sinn  
Ing C. Olivetti & C., S.p.A.  
Via G. Jervis 77  
Via Montalenghe 8 Scarmagno  
Ivrea (To) 10015 Italy  
39-125-527056

## A.98 OLISBC

WAVE form Registration Number (hex): 0x1003  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=1003  
WAVE form wFormatTag ID: WAVE\_FORMAT\_OLISBC  
Contact:  
Harry Sinn  
Ing C. Olivetti & C., S.p.A.  
Via G. Jervis 77  
Via Montalenghe 8 Scarmagno  
Ivrea (To) 10015 Italy  
39-125-527056

## A.99 OLIOPR

WAVE form Registration Number (hex): 0x1004  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=1004  
WAVE form wFormatTag ID: WAVE\_FORMAT\_OLIOPR  
Contact:  
Harry Sinn  
Ing C. Olivetti & C., S.p.A.  
Via G. Jervis 77  
Via Montalenghe 8 Scarmagno  
Ivrea (To) 10015 Italy  
39-125-527056

## A.100 LH Codec

WAVE form Registration Number (hex): 0x1100  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=1100  
WAVE form wFormatTag ID: WAVE\_FORMAT\_LH\_CODEC  
Contact:  
David Ray  
Lernout & Hauspie  
20 Mall Road  
Burlington, MA 01803 USA

## A.101 Norris

WAVE form Registration Number (hex): 0x1400  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=1400  
WAVE form wFormatTag ID: WAVE\_FORMAT\_NORRIS  
Contact:  
Rick Davis  
Norris Communications, Inc  
12725 Stowe Drive  
Poway, California 92064 USA  
619-679-1504

## A.102 ISIAudio

WAVE form Registration Number (hex): 0x1401  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=1401  
WAVE form wFormatTag ID: WAVE\_FORMAT\_ISIAUDIO  
Contact:  
Tomislav Gracanac  
(408) 576-1361  
AT&T Labs, Inc.  
2665 North First Street  
San Jose, California 95134 USA

## A.103 Soundspace Music Compression

WAVE form Registration Number (hex): 0x1500  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=1500  
WAVE form wFormatTag ID: WAVE\_FORMAT\_SOUNDSPACE\_MUSICOMPRESS  
Contact:  
Tomislav Gracanac  
(408) 576-1361  
AT&T Labs, Inc.  
2665 North First Street  
San Jose, California 95134 USA

## A.104 DVM

WAVE form Registration Number (hex): 0x2000  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=2000  
WAVE form wFormatTag ID: WAVE\_FORMAT\_DVM  
Contact:  
Martin Regen  
FAST Multimedia AG  
Lansbergerstrasse 76  
Munchen 80339 Germany  
49-89-50206-0

## Appendix B Video Codecs from the Microsoft AVI Registry

## B.1 Intel RDX

Compression Code or FourCC Codec ID: ANIM  
Codec ID in the IANA Namespace: video/vnd.avi;codec=ANIM  
Description: Intel RDX  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

## B.2 AuraVision Aura 2

Compression Code or FourCC Codec ID: AUR2  
Codec ID in the IANA Namespace: video/vnd.avi;codec=AUR2  
Description: AuraVision Aura 2: YUV 422  
Bit Depth: 8  
Contact:  
Steve Gibson  
510-440-7180  
Fast Multimedia  
47865 Fremont Blvd  
Fremont, California 94538 USA

## B.3 AuraVision Aura 1

Compression Code or FourCC Codec ID: AURA  
Codec ID in the IANA Namespace: video/vnd.avi;codec=AURA  
Description: AuraVision Aura 1: YUV 411  
Bit Depth: 6  
Contact:  
Steve Gibson  
510-440-7180  
Fast Multimedia  
47865 Fremont Blvd  
Fremont, California 94538 USA

## B.4 Brooktree MediaStream

Compression Code or FourCC Codec ID: BT20  
Codec ID in the IANA Namespace: video/vnd.avi;codec=BT20  
Description: Brooktree MediaStream  
Contact:  
Dave Wilson  
512-502-1725

Brooktree Corporation  
9868 Scranton Road  
San Diego, California 92121-3707 USA

#### B.5 Brooktree Composite Video

|                                      |                           |
|--------------------------------------|---------------------------|
| Compression Code or FourCC Codec ID: | BTCV                      |
| Codec ID in the IANA Namespace:      | video/vnd.avi;codec=BTCV  |
| Description:                         | Brooktree Composite Video |
| Contact:                             |                           |
| Dave Wilson                          |                           |
| 512-502-1725                         |                           |
| Brooktree Corporation                |                           |
| 9868 Scranton Road                   |                           |
| San Diego, California 92121-3707 USA |                           |

#### B.6 Intel YUV12

|                                      |                                |
|--------------------------------------|--------------------------------|
| Compression Code or FourCC Codec ID: | CC12                           |
| Codec ID in the IANA Namespace:      | video/vnd.avi;codec=CC12       |
| Description:                         | AuraVision Aura 2: Intel YUV12 |
| Contact:                             |                                |
| Intel Corporation                    |                                |
| 5200 NE Elam Young Parkway           |                                |
| Hillsboro, Oregon 97124 USA          |                                |
| 503-696-2448                         |                                |

#### B.7 Canopus DV

|                                      |                          |
|--------------------------------------|--------------------------|
| Compression Code or FourCC Codec ID: | CDVC                     |
| Codec ID in the IANA Namespace:      | video/vnd.avi;codec=CDVC |
| Description:                         | Canopus DV               |
| Contact:                             |                          |
| Masayoshi Araki                      |                          |
| 81-78-992-7812                       |                          |
| m-araki@canopus.co.jp                |                          |
| Canopus, Co., Ltd.                   |                          |
| Kobe Hi-Tech Park                    |                          |
| 1-2-2 Murotani, Nishi-ku             |                          |
| Kobe, Hyogo 651-22 Japan             |                          |

**B.8 Winnov Caviara Cham**

Compression Code or FourCC Codec ID: CHAM  
Codec ID in the IANA Namespace: video/vnd.avi;codec=CHAM  
Description: Winnov Caviara Cham  
Contact:  
Winnov, Inc.  
1230 Oakmead Parkway, Suite 312  
Sunnyvale, California 94086 USA  
408-733-7419

**B.9 Proprietary YUV 4 pixels**

Compression Code or FourCC Codec ID: CLJR  
Codec ID in the IANA Namespace: video/vnd.avi;codec=CLJR  
Description: Proprietary YUV 4 pixels/DWORD  
Contact:  
Mr Scott MacDonald  
512 442-7555  
Cirrus Logic

**B.10 Common Data Format in Printing**

Compression Code or FourCC Codec ID: CMYK  
Codec ID in the IANA Namespace: video/vnd.avi;codec=CMYK  
Description: Common Data Format in Printing  
Bit Depth: 32bits (8 per component)  
Contact:  
Colorgraph (UK)  
2 Mars House, Calleva Park  
Aldermaston, Reading, Berkshire RG7 8LB UK  
+44-118-9819435

**B.11 Weitek 4:2:0 YUV Planar**

Compression Code or FourCC Codec ID: CPLA  
Codec ID in the IANA Namespace: video/vnd.avi;codec=CPLA  
Description: Weitek 4:2:0 YUV Planar  
Contact:  
Weitek  
408-522-7541

## B.12 Cinepak by Supermac

|                                      |                          |
|--------------------------------------|--------------------------|
| Compression Code or FourCC Codec ID: | CVID                     |
| Codec ID in the IANA Namespace:      | video/vnd.avi;codec=CVID |
| Description:                         | Cenepac by Supermac      |
| Contact:                             |                          |
| Lou Doctor                           |                          |
| Supermac                             |                          |

## B.13 Microsoft Color WLT DIB

|                                      |                          |
|--------------------------------------|--------------------------|
| Compression Code or FourCC Codec ID: | CWLT                     |
| Codec ID in the IANA Namespace:      | video/vnd.avi;codec=CWLT |
| Description:                         | Microsoft Color WLT DIB  |
| Bit Depth:                           | 24                       |
| Contact:                             |                          |
| Terri Hendry                         |                          |
| 425-936-2069                         |                          |
| Microsoft Corporation                |                          |
| One Microsoft Way                    |                          |
| Redmond, WA 98052-6399 USA           |                          |

## B.14 Creative Labs YUV

|                                      |                          |
|--------------------------------------|--------------------------|
| Compression Code or FourCC Codec ID: | CYUV                     |
| Codec ID in the IANA Namespace:      | video/vnd.avi;codec=CYUV |
| Description:                         | Creative Labs YUV        |
| Contact:                             |                          |
| Peter Ridge                          |                          |
| 408-428-2366                         |                          |
| Creative Labs, Inc                   |                          |
| California, USA                      |                          |

## B.15 H.261

|                                      |                          |
|--------------------------------------|--------------------------|
| Compression Code or FourCC Codec ID: | D261                     |
| Codec ID in the IANA Namespace:      | video/vnd.avi;codec=D261 |
| Description:                         | H.261 Video Format       |
| Bit Depth:                           | 24                       |
| Contact:                             |                          |
| John Forecast                        |                          |
| forecast@shell.lkg.dec.com           |                          |
| 508-486-5264                         |                          |
| Digital Equipment Corporation        |                          |
| 146 Main Street                      |                          |
| Maynard, MA 01754-2571 USA           |                          |
| 1-800-DIGITAL                        |                          |

## B.16 H.263

Compression Code or FourCC Codec ID: D263  
Codec ID in the IANA Namespace: video/vnd.avi;codec=D263  
Description: H.263 Video Format  
Bit Depth: 24  
Contact:  
John Forecast  
forecast@shell.lkg.dec.com  
508-486-5264  
Digital Equipment Corporation  
146 Main Street  
Maynard, MA 01754-2571 USA  
1-800-DIGITAL

## B.17 True Motion 1.0

Compression Code or FourCC Codec ID: DUCK  
Codec ID in the IANA Namespace: video/vnd.avi;codec=DUCK  
Description: TrueMotion 1.0  
Contact:  
David Silver  
david@duck.com  
(212)941-2403  
The Duck Corporation  
375 Greenwich Street  
New York, NY 10013 USA  
(212) 941-2400  
<http://www.duck.com/>

## B.18 DVE-2 Videoconferencing

Compression Code or FourCC Codec ID: DVE2  
Codec ID in the IANA Namespace: video/vnd.avi;codec=DVE2  
Description: DVE-2 Videoconferencing  
Contact:  
Alexander V. Sokolsky  
InSoft, Inc.  
4718 Old Gettysburg Rd, Suite 307  
Mechanicsburg, PA 17055-4378 USA  
717-730-9501

**B.19 Field Encoded Motion JPEG**

Compression Code or FourCC Codec ID: FLJP  
Codec ID in the IANA Namespace: video/vnd.avi;codec=FLJP  
Description: Field Encoded Motion JPEG With LSI  
Bitstream Format  
Contact:  
Dale Weaver  
weaverdm@dvision.com  
312-714-1400 -2169  
D-Vision Systems, Inc.  
8755 W. Higgins, Second Floor  
Chicago, IL 60631 USA

**B.20 Fractal Video Frame**

Compression Code or FourCC Codec ID: FVF1  
Codec ID in the IANA Namespace: video/vnd.avi;codec=FVF1  
Description: Fractal Video Frame  
Contact:  
Iterated Systems, Inc.  
5550-a Peachtree Parkway, Suite 650  
Norcross, GA 30092 USA  
404-840-0633

**B.21 Microsoft Greyscale WLT DIB**

Compression Code or FourCC Codec ID: GWLT  
Codec ID in the IANA Namespace: video/vnd.avi;codec=GWLT  
Description: Microsoft Greyscale WLT DIB  
Bit Depth: 8  
Contact:  
Terri Hendry  
425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

**B.22 H.260**

Compression Code or FourCC Codec ID: H260  
Codec ID in the IANA Namespace: video/vnd.avi;codec=H260  
Description: H.260  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

## B.23 H.261

Compression Code or FourCC Codec ID: H261  
Codec ID in the IANA Namespace: video/vnd.avi;codec=H261  
Description: H.261  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

## B.24 H.262

Compression Code or FourCC Codec ID: H262  
Codec ID in the IANA Namespace: video/vnd.avi;codec=H262  
Description: H.262  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

## B.25 H.263

Compression Code or FourCC Codec ID: H263  
Codec ID in the IANA Namespace: video/vnd.avi;codec=H263  
Description: H.263  
Bit Depth: 12/pixel  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

## B.26 H.264

Compression Code or FourCC Codec ID: H264  
Codec ID in the IANA Namespace: video/vnd.avi;codec=H264  
Description: H.264  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

## B.27      H.265

Compression Code or FourCC Codec ID:      H265  
Codec ID in the IANA Namespace:      video/vnd.avi;codec=H265  
Description:      H.265  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

## B.28      H.266

Compression Code or FourCC Codec ID:      H266  
Codec ID in the IANA Namespace:      video/vnd.avi;codec=H266  
Description:      H.266  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

## B.29      H.267

Compression Code or FourCC Codec ID:      H267  
Codec ID in the IANA Namespace:      video/vnd.avi;codec=H267  
Description:      H.267  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

## B.30      H.268

Compression Code or FourCC Codec ID:      H268  
Codec ID in the IANA Namespace:      video/vnd.avi;codec=H268  
Description:      H.268  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

## B.31 H.260

Compression Code or FourCC Codec ID: H269  
Codec ID in the IANA Namespace: video/vnd.avi;codec=H269  
Description: H.269  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

## B.32 I263

Compression Code or FourCC Codec ID: I263  
Codec ID in the IANA Namespace: video/vnd.avi;codec=I263  
Description: Intel I263  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

## B.33 Intel Indeo 4

Compression Code or FourCC Codec ID: I420  
Codec ID in the IANA Namespace: video/vnd.avi;codec=I420  
Description: Intel Indeo 4  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

## B.34 Intel RDX

Compression Code or FourCC Codec ID: IAN  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IAN  
Description: Intel RDX  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.35 CellB Videoconferencing Codec**

Compression Code or FourCC Codec ID: ICLB  
Codec ID in the IANA Namespace: video/vnd.avi;codec=ICLB  
Description: CellB Videoconferencing Codec  
Contact:  
Alexander V. Sokolsky  
InSoft, Inc.  
4718 Old Gettysburg Rd, Suite 307  
Mechanicsburg, PA 17055-4378 USA  
717-730-9501

**B.36 Intel Layered Video**

Compression Code or FourCC Codec ID: ILVC  
Codec ID in the IANA Namespace: video/vnd.avi;codec=ILVC  
Description: Intel Layered Video  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.37 ITU-T H.263+**

Compression Code or FourCC Codec ID: ILVR  
Codec ID in the IANA Namespace: video/vnd.avi;codec=ILVR  
Description: nITU-T's H.263+ compression standard  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.38 Intel YUV Uncompressed**

Compression Code or FourCC Codec ID: IRAW  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IRAW  
Description: Intel YUV uncompressed  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.39 Intel Indeo Video 3**

Compression Code or FourCC Codec ID: IV30  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV30  
Description: Intel Indeo Video 3  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.40 Intel Indeo Video 3.1**

Compression Code or FourCC Codec ID: IV31  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV31  
Description: Intel Indeo Video 3.1  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.41 Intel Indeo Video 3.2**

Compression Code or FourCC Codec ID: IV32  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV32  
Description: Intel Indeo Video 3.2  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.42 Intel Indeo Video 3.3**

Compression Code or FourCC Codec ID: IV33  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV33  
Description: Intel Indeo Video 3.3  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.43 Intel Indeo Video 3.4**

Compression Code or FourCC Codec ID: IV34  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV34  
Description: Intel Indeo Video 3.4  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.44 Intel Indeo Video 3.5**

Compression Code or FourCC Codec ID: IV35  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV35  
Description: Intel Indeo Video 3.5  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.45 Intel Indeo Video 3.6**

Compression Code or FourCC Codec ID: IV36  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV36  
Description: Intel Indeo Video 3.6  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.46 Intel Indeo Video 3.7**

Compression Code or FourCC Codec ID: IV37  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV37  
Description: Intel Indeo Video 3.7  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.47 Intel Indeo Video 3.8**

Compression Code or FourCC Codec ID: IV38  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV38  
Description: Intel Indeo Video 3.8  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.48 Intel Indeo Video 3.9**

Compression Code or FourCC Codec ID: IV39  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV39  
Description: Intel Indeo Video 3.9  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.49 Intel Indeo Video 4.0**

Compression Code or FourCC Codec ID: IV40  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV40  
Description: Intel Indeo Video 4.0  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.50 Intel Indeo Video 4.1**

Compression Code or FourCC Codec ID: IV41  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV41  
Description: Intel Indeo Video 4.1  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.51 Intel Indeo Video 4.2**

Compression Code or FourCC Codec ID: IV42  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV42  
Description: Intel Indeo Video 4.2  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.52 Intel Indeo Video 4.3**

Compression Code or FourCC Codec ID: IV43  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV43  
Description: Intel Indeo Video 4.3  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.53 Intel Indeo Video 4.4**

Compression Code or FourCC Codec ID: IV44  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV44  
Description: Intel Indeo Video 4.4  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.54 Intel Indeo Video 4.5**

Compression Code or FourCC Codec ID: IV45  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV45  
Description: Intel Indeo Video 4.5  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.55 Intel Indeo Video 4.6**

Compression Code or FourCC Codec ID: IV46  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV46  
Description: Intel Indeo Video 4.6  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.56 Intel Indeo Video 4.7**

Compression Code or FourCC Codec ID: IV47  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV47  
Description: Intel Indeo Video 4.7  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.57 Intel Indeo Video 4.8**

Compression Code or FourCC Codec ID: IV48  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV48  
Description: Intel Indeo Video 4.8  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.58 Intel Indeo Video 4.9**

Compression Code or FourCC Codec ID: IV49  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV49  
Description: Intel Indeo Video 4.9  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.59 Intel Indeo Video 5.0**

Compression Code or FourCC Codec ID: IV50  
Codec ID in the IANA Namespace: video/vnd.avi;codec=IV50  
Description: Intel Indeo Video 5.0  
Bit Depth: 8, 16, 24, 32  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.60 Still Image JPEG DIB**

Compression Code or FourCC Codec ID: JPEG  
Codec ID in the IANA Namespace: video/vnd.avi;codec=JPEG  
Description: Still Image JPEG DIB  
Contact:  
Terri Hendry  
425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

**B.61 Motion JPEG DIB**

Compression Code or FourCC Codec ID: MJPG  
Codec ID in the IANA Namespace: video/vnd.avi;codec=MJPG  
Description: Motion JPEG DIB Format  
Bit Depth: 24, 8  
Contact:  
Terri Hendry  
425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

**B.62 Microsoft MPEG-4 Video Codec**

Compression Code or FourCC Codec ID: MP42  
Codec ID in the IANA Namespace: video/vnd.avi;codec=MP42  
Description: Microsoft MPEG-4 Video Codec V2  
Contact:  
Terri Hendry  
425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

**B.63 MPEG 1 Video Frame**

Compression Code or FourCC Codec ID: MPEG  
Codec ID in the IANA Namespace: video/vnd.avi;codec=MPEG  
Description: MPEG 1 Video I Frame  
Contact:  
Greg Stiehl  
stiehl@chromatic.com  
Chromatic Research, Inc  
615 Tasman Dr  
Sunnyvale, California 94089 USA  
408-752-9100

**B.64 MR Codec**

Compression Code or FourCC Codec ID: MRCA  
Codec ID in the IANA Namespace: video/vnd.avi;codec=MRCA  
Description: MR Codec  
Contact:  
Martin Regen  
49/89/50206-252  
FAST Multimedia AG  
Lansbergerstrasse 76  
Munchen 80339 Germany  
49/89/50206-0

**B.65 Run Length Encoding**

Compression Code or FourCC Codec ID: MRLE  
Codec ID in the IANA Namespace: video/vnd.avi;codec=MRLE  
Description: Run Length Encoding  
Contact:  
Terri Hendry, 425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

**B.66 Video 1**

Compression Code or FourCC Codec ID: MSVC  
Codec ID in the IANA Namespace: video/vnd.avi;codec=MSVC  
Description: Microsoft Video 1  
Contact:  
Terri Hendry, 425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

**B.67 Photomotion**

Compression Code or FourCC Codec ID: PHMO  
Codec ID in the IANA Namespace: video/vnd.avi;codec=PHMO  
Description: Photomotion  
Contact:  
IBM Corporation

**B.68 QPEG 1.1 Format Video**

Compression Code or FourCC Codec ID: qpeq  
Codec ID in the IANA Namespace: video/vnd.avi;codec=qpeq  
Description: QPEG 1.1 Format Video Codec  
Contact:  
Dr. Knabe  
0049.2161.6181.0  
Q-Team  
Brauereistr. 11  
D-41352 Korschenbroich Germany  
0049.2161.6181.0

**B.69 RGBT**

Compression Code or FourCC Codec ID: RGBT  
Codec ID in the IANA Namespace: video/vnd.avi;codec=RGBT  
Description: 32 bits support  
Contact:  
Andy Pennell  
Computer Concepts Ltd.  
Gaddesden Place  
Hemel Hempstead, Herts HP2 6EX UK  
44 1442 63933

**B.70 Run Length Encoded 4**

Compression Code or FourCC Codec ID: RLE4  
Codec ID in the IANA Namespace: video/vnd.avi;codec=RLE4  
Description: Run Length Encoded 4  
Bit Depth: 4  
Contact:  
Terri Hendry  
425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

**B.71 Run Length Encoded 8**

Compression Code or FourCC Codec ID: RLE8  
Codec ID in the IANA Namespace: video/vnd.avi;codec=RLE8  
Description: Run Length Encoded 8  
Bit Depth: 8  
Contact:  
Terri Hendry, 425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

**B.72 Indeo 2.1**

Compression Code or FourCC Codec ID: RT21  
Codec ID in the IANA Namespace: video/vnd.avi;codec=RT21  
Description: Indeo 2.1  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.73 Intel RDX**

Compression Code or FourCC Codec ID: RVX  
Codec ID in the IANA Namespace: video/vnd.avi;codec=RVX  
Description: Intel RDX  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.74 Sun Digital Camera Codec**

Compression Code or FourCC Codec ID: SDCC  
Codec ID in the IANA Namespace: video/vnd.avi;codec=SDCC  
Description: Sun Digital Camera Codec  
Contact:  
Hideki Inoue  
hinoue@sun-denshi.co.jp  
Sun Communications, Inc.  
GLORIA Bld. 6F, 1-3, AGEBA-CHO, SHINJYUKU-KU  
Tokyo 162 Japan  
81-3-5261-1801

**B.75 Crystal Net SFM Codec**

Compression Code or FourCC Codec ID: SFMC  
Codec ID in the IANA Namespace: video/vnd.avi;codec=SFMC  
Description: Crystal Net SFM Codec  
Contact:  
Dr. Itzhak Levit  
Crystal Net Corporation  
1485 Saratoga Ave.  
San Jose, California 95129 USA  
408-446-2966

**B.76 SMSC**

Compression Code or FourCC Codec ID: SMSC  
Codec ID in the IANA Namespace: video/vnd.avi;codec=SMSC  
Description: SMSC  
Contact:  
Lee Boekelheide  
Radius (USA)  
503-968-1270

**B.77 SMSD**

Compression Code or FourCC Codec ID: SMSD  
Codec ID in the IANA Namespace: video/vnd.avi;codec=SMSD  
Description: SMSD  
Contact:  
Lee Boekelheide  
Radius (USA)  
503-968-1270

**B.78 Splash Studios ACM Audio Codec**

Compression Code or FourCC Codec ID: SPLC  
Codec ID in the IANA Namespace: audio/vnd.wave;codec=SPLC  
Description: Splash Studios ACM Audio Codec  
Contact:  
Mark Cutter  
Splash Studios  
8573 154th Avenue NE  
Redmond, WA 98052 USA  
425-882-0300

**B.79 Microsoft Vxtreme Video Codec**

Compression Code or FourCC Codec ID: SQZ2  
Codec ID in the IANA Namespace: video/vnd.avi;codec=SQZ2  
Description: Microsoft Vxtreme Video Codec V2  
Contact:  
Terri Hendry  
425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

**B.80 Sorenson Video R1**

Compression Code or FourCC Codec ID: SV10  
Codec ID in the IANA Namespace: video/vnd.avi;codec=SV10  
Description: Sorenson Video R1  
Contact:  
Evan Hillman  
ehillman@s-vision.com  
Sorenson Vision  
570 East Research Park Way  
Logan, Utah 84341 USA  
801-792-1114

**B.81 TeraLogic Motion Intraframe Codec A**

Compression Code or FourCC Codec ID: TLMS  
Codec ID in the IANA Namespace: video/vnd.avi;codec=TLMS  
Description: TeraLogic Motion Intraframe Codec  
Contact:  
Charles Chui  
chui@teralogic-inc.com  
650-526-6003  
TeraLogic, Inc.  
707 California Street  
Mountain View, California 94041 USA  
650-526-2000

**B.82 TeraLogic Motion Intraframe Codec B**

Compression Code or FourCC Codec ID: TLST  
Codec ID in the IANA Namespace: video/vnd.avi;codec=TLST  
Description: TeraLogic Motion Intraframe Codec  
Contact:  
Charles Chui  
chui@teralogic-inc.com  
650-526-6003  
TeraLogic, Inc.  
707 California Street  
Mountain View, California 94041 USA  
650-526-2000

**B.83 TrueMotion 2.0**

Compression Code or FourCC Codec ID: TM20  
Codec ID in the IANA Namespace: video/vnd.avi;codec=TM20  
Description: TrueMotion 2.0  
Contact:  
David Silver  
david@duck.com  
(212) 941-2403  
The Duck Corporation  
375 Greenwich Street  
New York, New York 10013 USA  
(212) 941-2400

**B.84 TeraLogic Motion Intraframe Codec 2**

Compression Code or FourCC Codec ID: TMIC  
Codec ID in the IANA Namespace: video/vnd.avi;codec=TMIC  
Description: TeraLogic Motion Intraframe Codec 2  
Contact:  
Charles Chui  
chui@teralogic-inc.com  
650-526-6003  
TeraLogic, Inc.  
707 California Street  
Mountain View, California 94041 USA  
650-526-2000

**B.85 TrueMotion Video Compression**

Compression Code or FourCC Codec ID: tmot  
Codec ID in the IANA Namespace: video/vnd.avi;codec=tmot  
Description: True Motion Video Compression  
Contact:  
Glen D. Johnson  
Horizons Technology, Inc  
3990 Ruffin Road  
San Diego, California 92123 USA  
619-292-8331

**B.86 TrueMotion RT 2.0**

Compression Code or FourCC Codec ID: TR20  
Codec ID in the IANA Namespace: video/vnd.avi;codec=TR20  
Description: TrueMotionRT 2.0  
Contact:  
David Silver  
david@duck.com  
(212) 941-2403  
The Duck Corporation  
375 Greenwich Street  
New York, New York 10013 USA  
(212) 941-2400

**B.87 Ultimotion**

Compression Code or FourCC Codec ID: ULTI  
Codec ID in the IANA Namespace: video/vnd.avi;codec=ULTI  
Description: Ultimotion  
Contact:  
IBM Corporation

**B.88 UYVY 4:2:2 byte ordering**

Compression Code or FourCC Codec ID: UYVY  
Codec ID in the IANA Namespace: video/vnd.avi;codec=UYVY  
Description: UYVY 4:2:2 byte ordering  
Bit Depth: 16  
Contact:  
Terri Hendry  
425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

**B.89 24 bit YUV 4:2:2 Format**

Compression Code or FourCC Codec ID: V422  
Codec ID in the IANA Namespace: video/vnd.avi;codec=V422  
Description: 24 bit YUV 4:2:2 format (CCIR 601).  
For this format, 2 consecutive pixels are represented by a 32 bit (4  
byte) Y1UY2V color value.  
Contact:  
Gueirard RJ  
33 1 46 29 0300  
Vitec Multimedia  
99 rue Pierre Semard  
F-92320 Chatillon France  
33-1-46-73-06-06

**B.90 16 bit YUV 4:2:2 Format**

Compression Code or FourCC Codec ID: V655  
Codec ID in the IANA Namespace: video/vnd.avi;codec=V655  
Description: 16 bit YUV 4:2:2 Format Codec  
Contact:  
Gueirard RJ  
33 1 46 29 0300  
Vitec Multimedia  
99 rue Pierre Semard  
F-92320 Chatillon France  
33-1-46-73-06-06

**B.91 ATI VCR 1.0**

Compression Code or FourCC Codec ID: VCR1  
Codec ID in the IANA Namespace: video/vnd.avi;codec=VCR1  
Description: ATI VCR 1.0  
Contact:  
Ivan Yang  
Ivan@atitech.ca  
905-882-2600 x3243  
ATI Technologies Inc.  
33 Commerce Valley Dr. E.  
Thornhill, Ontario L3T 7N6 Canada  
905-882-2600

## B.92     ATI VCR 2.0

Compression Code or FourCC Codec ID:     VCR2  
Codec ID in the IANA Namespace:     video/vnd.avi;codec=VCR2  
Description:     ATI VCR 2.0  
Contact:  
Ivan Yang  
Ivan@atitech.ca  
905-882-2600 x3243  
ATI Technologies Inc.  
33 Commerce Valley Dr. E.  
Thornhill, Ontario L3T 7N6 Canada  
905-882-2600

## B.93     ATI VCR 3.0

Compression Code or FourCC Codec ID:     VCR3  
Codec ID in the IANA Namespace:     video/vnd.avi;codec=VCR3  
Description:     ATI VCR 3.0  
Contact:  
Ivan Yang  
Ivan@atitech.ca  
905-882-2600 x3243  
ATI Technologies Inc.  
33 Commerce Valley Dr. E.  
Thornhill, Ontario L3T 7N6 Canada  
905-882-2600

## B.94     ATI VCR 4.0

Compression Code or FourCC Codec ID:     VCR4  
Codec ID in the IANA Namespace:     video/vnd.avi;codec=VCR4  
Description:     ATI VCR 4.0  
Contact:  
Ivan Yang  
Ivan@atitech.ca  
905-882-2600 x3243  
ATI Technologies Inc.  
33 Commerce Valley Dr. E.  
Thornhill, Ontario L3T 7N6 Canada  
905-882-2600

## B.95     ATI VCR 5.0

Compression Code or FourCC Codec ID:     VCR5  
Codec ID in the IANA Namespace:     video/vnd.avi;codec=VCR5  
Description:     ATI VCR 5.0  
Contact:  
Ivan Yang  
Ivan@atitech.ca  
905-882-2600 x3243  
ATI Technologies Inc.  
33 Commerce Valley Dr. E.  
Thornhill, Ontario L3T 7N6 Canada  
905-882-2600

## B.96     ATI VCR 6.0

Compression Code or FourCC Codec ID:     VCR6  
Codec ID in the IANA Namespace:     video/vnd.avi;codec=VCR6  
Description:     ATI VCR 6.0  
Contact:  
Ivan Yang  
Ivan@atitech.ca  
905-882-2600 x3243  
ATI Technologies Inc.  
33 Commerce Valley Dr. E.  
Thornhill, Ontario L3T 7N6 Canada  
905-882-2600

## B.97     ATI VCR 7.0

Compression Code or FourCC Codec ID:     VCR7  
Codec ID in the IANA Namespace:     video/vnd.avi;codec=VCR7  
Description:     ATI VCR 7.0  
Contact:  
Ivan Yang  
Ivan@atitech.ca  
905-882-2600 x3243  
ATI Technologies Inc.  
33 Commerce Valley Dr. E.  
Thornhill, Ontario L3T 7N6 Canada  
905-882-2600

**B.98     ATI VCR 8.0**

Compression Code or FourCC Codec ID:     VCR8  
Codec ID in the IANA Namespace:     video/vnd.avi;codec=VCR8  
Description:     ATI VCR 8.0  
Contact:  
Ivan Yang  
Ivan@atitech.ca  
905-882-2600 x3243  
ATI Technologies Inc.  
33 Commerce Valley Dr. E.  
Thornhill, Ontario L3T 7N6 Canada  
905-882-2600

**B.99     ATI VCR 9.0**

Compression Code or FourCC Codec ID:     VCR9  
Codec ID in the IANA Namespace:     video/vnd.avi;codec=VCR9  
Description:     ATI VCR 9.0  
Contact:  
Ivan Yang  
Ivan@atitech.ca  
905-882-2600 x3243  
ATI Technologies Inc.  
33 Commerce Valley Dr. E.  
Thornhill, Ontario L3T 7N6 Canada  
905-882-2600

**B.100    Video Maker Pro DIB**

Compression Code or FourCC Codec ID:     VDCT  
Codec ID in the IANA Namespace:     video/vnd.avi;codec=VDCT  
Description:     Video Maker Pro DIB  
Bit Depth:     16  
Contact:  
Gueirard RJ  
33 1 46 29 0300  
Vitec Multimedia  
99 rue Pierre Semard  
F-92320 Chatillon France  
33-1-46-73-06-06

## B.101 YUV 4:2:2 CCIR 601 for V422

Compression Code or FourCC Codec ID: VIDS  
Codec ID in the IANA Namespace: video/vnd.avi;codec=VIDS  
Description: YUV 4:2:2 CCIR for V422  
Bit Depth: 24, 16  
Contact:  
Gueirard RJ  
33 1 46 29 0300  
Vitec Multimedia  
99 rue Pierre Semard  
F-92320 Chatillon France  
33-1-46-73-06-06

## B.102 Vivo H.263

Compression Code or FourCC Codec ID: VIVO (Note: it is also registered as vivo)  
Codec ID in the IANA Namespace: video/vnd.avi;codec=VIVO  
(Note: it is also registered as video/vnd.avi;codec=vivo)  
Description: Vivo H.263  
Bit Depth: 16  
Contact:  
Vivo Software  
411 Waverley Oaks Road, Suite 313  
Waltham, MA 02154 USA  
(617) 899-8900

## B.103 VIXL

Compression Code or FourCC Codec ID: VIXL  
Codec ID in the IANA Namespace: video/vnd.avi;codec=VIXL  
Description: for use with the miro video  
and movie products  
Bit Depth: 8, 16, 24  
Contact:  
Matthias Huebner  
49-531-2113-519  
Miro Computer Products AG  
Carl-Miele-Strasse 4  
Braunschweig 38112 Germany  
49-531-2113-0

## B.104 VLCAP.DRV

Compression Code or FourCC Codec ID: VLV1  
Codec ID in the IANA Namespace: video/vnd.avi;codec=VLV1  
Description: VLCAP.DRV  
Contact:  
Videologic  
Home Park Estate  
Kings Langley WD4 8LZ UK  
44923260511

## B.105 W9960

Compression Code or FourCC Codec ID: WBVC  
Codec ID in the IANA Namespace: video/vnd.avi;codec=WBVC  
Description: W9960  
Contact:  
Jason Lin  
JLLIN@winbond.com.tw  
Winbond Electronics Corp  
PG41, No. 9, Li Hsin Rd.  
Science-Based Industrial Park  
Hsinchu, Taiwan  
886-3-5790666 x6641

## B.106 mmioFOURCC('X','2','6','3')

Compression Code or FourCC Codec ID: X263  
Codec ID in the IANA Namespace: video/vnd.avi;codec=X263  
Description: mmioFOURCC('X','2','6','3')  
Bit Depth: 12 bits/pixel  
Contact:  
Min-Hsiung Lin  
Min.Lin@xirlink.com  
Xirlink, Inc.  
2210 O'Toole Ave.  
San Jose, California 95131 USA  
408-324-2100

## B.107 XL Video Decoder

Compression Code or FourCC Codec ID: XLV0  
Codec ID in the IANA Namespace: video/vnd.avi;codec=XLV0  
Description: PC1 4:1:1 with transparency  
Contact:  
Gary Grandbois  
NetXL, Inc  
48521 Warm Springs Blvd., Suite 310  
Fremont, California 94539 USA  
510-445-8734

## B.108 YUV 2:1:1 Packed

Compression Code or FourCC Codec ID: Y211  
Codec ID in the IANA Namespace: video/vnd.avi;codec=Y211  
Description: YUV 2:1:1 Packed  
Bit Depth: 8  
Contact:  
Terri Hendry, 425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

## B.109 YUV 4:1:1 Packed

Compression Code or FourCC Codec ID: Y411  
Codec ID in the IANA Namespace: video/vnd.avi;codec=Y411  
Description: YUV 4:1:1 Packed  
Bit Depth: 16  
Contact:  
Terri Hendry, 425-936-2069  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

## B.110 YUV 4:1:1 Planar

Compression Code or FourCC Codec ID: Y41B  
Codec ID in the IANA Namespace: video/vnd.avi;codec=Y41B  
Description: YUV 4:1:1 Planar  
Contact:  
408-522-7541  
Weitek (USA)

**B.111 PC1 4:1:1**

Compression Code or FourCC Codec ID: Y41P  
Codec ID in the IANA Namespace: video/vnd.avi;codec=Y41P  
Description: PC1 4:1:1  
Bit Depth: 12  
Contact:  
Dave Wilson  
512-502-1725  
Brooktree Corporation  
9868 Scranton Road  
San Diego, California 92121-3707 USA  
1-800-228-2777

**B.112 PC1 4:1:1 with transparency**

Compression Code or FourCC Codec ID: Y41T  
Codec ID in the IANA Namespace: video/vnd.avi;codec=Y41T  
Description: PC1 4:1:1 with transparency  
Bit Depth: 12  
Contact:  
Dave Wilson  
512-502-1725  
Brooktree Corporation  
9868 Scranton Road  
San Diego, California 92121-3707 USA  
1-800-228-2777

**B.113 YUV 4:2:2 Planar**

Compression Code or FourCC Codec ID: Y42B  
Codec ID in the IANA Namespace: video/vnd.avi;codec=Y42B  
Description: YUV 4:2:2 Planar  
Contact:  
Weitek (USA)  
408-522-7541

**B.114 PCI 4:2:2 with transparency**

Compression Code or FourCC Codec ID: Y42T  
Codec ID in the IANA Namespace: video/vnd.avi;codec=Y42T  
Description: PCI 4:2:2 with transparency  
Bit Depth: 12  
Contact:  
Dave Wilson  
512-502-1725  
Brooktree Corporation  
9868 Scranton Road  
San Diego, California 92121-3707 USA  
1-800-228-2777

**B.115 Intel YUV12 Codec**

Compression Code or FourCC Codec ID: YC12  
Codec ID in the IANA Namespace: video/vnd.avi;codec=YC12  
Description: Intel YUV12 Codec  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.116 Winnov Caviar YUV8**

Compression Code or FourCC Codec ID: YUV8  
Codec ID in the IANA Namespace: video/vnd.avi;codec=YUV8  
Description: Winnov Caviar YUV8  
Contact:  
Winnov, Inc.  
1230 Oakmead Parkway, Suite 312  
Sunnyvale, California 94086  
408-733-7419

**B.117 YUV9**

Compression Code or FourCC Codec ID: YUV9  
Codec ID in the IANA Namespace: video/vnd.avi;codec=YUV9  
Description: YUV9  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

**B.118 YUYV 4:2:2 byte ordering packed**

Compression Code or FourCC Codec ID: YUY2  
Codec ID in the IANA Namespace: video/vnd.avi;codec=YUY2  
Description: YUYV 4:2:2 byte ordering packed  
Bit Depth: 16  
Contact:  
Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052-6399 USA

**B.119 BI\_YUYV, Canopus**

Compression Code or FourCC Codec ID: YUYV  
Codec ID in the IANA Namespace: video/vnd.avi;codec=YUYV  
Description: BI\_YUYV, Canopus  
Bit Depth: 16  
Contact:  
Masayoshi Araki  
m-araki@canopus.co.jp  
81-78-992-7812  
Canopus, Co., Ltd.  
Kobe Hi-Tech Park  
1-2-2 Murotani, Nishi-ku  
Kobe, Hyogo 651-22 Japan

**B.120 YVU12 Planar**

Compression Code or FourCC Codec ID: YV12  
Codec ID in the IANA Namespace: video/vnd.avi;codec=YV12  
Description: YVU12 Planar  
Contact:  
Weitek  
408-522-7541

**B.121 YVU9 Planar**

Compression Code or FourCC Codec ID: YVU9  
Codec ID in the IANA Namespace: video/vnd.avi;codec=YVU9  
Description: YVU9 Planar  
Bit Depth: 9  
Contact:  
Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124 USA  
503-696-2448

## B.122 YVYU 4:2:2 byte ordering

|                                      |                          |
|--------------------------------------|--------------------------|
| Compression Code or FourCC Codec ID: | YVYU                     |
| Codec ID in the IANA Namespace:      | video/vnd.avi;codec=YUV9 |
| Description:                         | YVYU                     |
| Bit Depth:                           | 16                       |
| Contact:                             |                          |
| Microsoft Corporation                |                          |
| One Microsoft Way                    |                          |
| Redmond, WA 98052-6399 USA           |                          |

## B.123 Video Zipper

|                                      |                          |
|--------------------------------------|--------------------------|
| Compression Code or FourCC Codec ID: | ZPEG                     |
| Codec ID in the IANA Namespace:      | video/vnd.avi;codec=ZPEG |
| Description:                         | for the Video Zipper     |
| Contact:                             |                          |
| Metheus                              |                          |
| 1600 NW Compton Drive                |                          |
| Beaverton, Oregon 97006-6905 USA     |                          |
| 503-690-1550                         |                          |

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