
**Information technology — Coding of
audio-visual objects —**

**Part 27:
3D Graphics conformance**

**AMENDMENT 3: Scalable complexity 3D
mesh coding conformance in 3DGCM**

Technologies de l'information — Codage des objets audiovisuels —

Partie 27: Conformité aux graphiques 3D

*AMENDEMENT 3: Conformité de l'encodage de maille en 3D de
complexité atteignable au modèle 3DGCM*



COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2011

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

Amendment 3 to ISO/IEC 14496-27:2009 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

STANDARDSISO.COM : Click to view the full PDF of ISO/IEC 14496-27:2009/Amd 3:2011

Information technology — Coding of audio-visual objects —

Part 27:

3D Graphics conformance

AMENDMENT 3: Scalable complexity 3D mesh coding conformance in 3DGCM

In 6.3.2 Test bitstreams, replace:

Name (for bitstream filename, add .mp4)	Attribute	X3D file (.x3d)	XMT file (.xmt)	COLLADA file (.dae)
axe	File with simple static mesh	axe	axe	axe
cottage	File with one big mesh	cottage	cottage	cottage
xplaneh	File with more static meshes and color	xplaneh	xplaneh	xplaneh
basketball	File with static mesh and texture	basketball	basketball	basketball
box	File with static mesh with texture	box	box	box
rabbit	File with bone-based animation and texture	N/A	rabbit	rabbit
eagle	File with bone-based animation and texture	N/A	eagle	eagle
hero	File with more meshes and animation	Hero	hero	hero
PI_troll	File with PositionInterpolator animation and textures	PI_Troll	PI_Troll	PI_Troll
OI_rabbit	File with OrientationInterpolator animation and textures	OI_rabbit	OI_rabbit	OI_rabbit
CI_box	File with CoordinateInterpolator animation	CI_box	CI_box	CI_box
eagle-fb	File with frame-based animation	eagle-fb	eagle-fb	eagle-fb
shark-fb	File with frame-based animation	shark-fb	shark-fb	shark-fb
wolf-fb	File with frame-based animation	wolf-fb	wolf-fb	wolf-fb
dragon-fb	File with frame-based animation	dragon-fb	dragon-fb	dragon-fb
tablecloth-fb	File with frame-based animation	tablecloth-fb	tablecloth-fb	tablecloth-fb

with:

Name (for bitstream filename, add .mp4)	Attribute/Parameter	AFX codecs	X3D file (.x3d)	XMT file (.xmt)	COLLADA file (.dae)
axe	File with simple static mesh	3DMCe	axe	axe	axe
cottage	File with one big mesh	3DMCe	cottage	cottage	cottage
xplaneh	File with more static meshes and color	3DMCe	xplaneh	xplaneh	xplaneh
basketball	File with static mesh and texture	3DMCe	basketball	basketball	basketball
box	File with static mesh with texture	3DMCe	box	box	box
rabbit	File with bone-based animation and texture	3DMCe, BBA	N/A	rabbit	rabbit
eagle	File with bone-based animation and texture	3DMCe, BBA	N/A	eagle	eagle
hero	File with more meshes and animation	3DMCe, BBA	Hero	hero	hero
PI_troll	File with PositionInterpolator animation and textures	3DMCe, PI	PI_Troll	PI_Troll	PI_Troll
OI_rabbit	File with OrientationInterpolator animation and textures	3DMCe, OI	OI_rabbit	OI_rabbit	OI_rabbit
CI_box	File with CoordinateInterpolator animation	3DMCe, CI	CI_box	CI_box	CI_box
eagle-fb	File with frame-based animation	3DMCe, FAMC	eagle-fb	eagle-fb	eagle-fb
shark-fb	File with frame-based animation	3DMCe, FAMC	shark-fb	shark-fb	shark-fb
wolf-fb	File with frame-based animation	3DMCe, FAMC	wolf-fb	wolf-fb	wolf-fb
dragon-fb	File with frame-based animation	3DMCe, FAMC	dragon-fb	dragon-fb	dragon-fb
tablecloth-fb	File with frame-based animation	3DMCe, FAMC	tablecloth-fb	tablecloth-fb	tablecloth-fb
AXE_Q_CD_EG	QBCR, circular prediction, Exponential Golomb entropy coding	SC3DMC	N/A	N/A	Axe
AXE_Q_CD_AC	QBCR, circular prediction, Arithmetic coding	SC3DMC	N/A	N/A	Axe
AXE_Q_CD_BP	QBCR, circular prediction, Bit precision entropy coding	SC3DMC	N/A	N/A	Axe
AXE_Q_CD_4C	QBCR, circular prediction, 4-bit entropy coding	SC3DMC	N/A	N/A	Axe

Name (for bitstream filename, add .mp4)	Attribute/Parameter	AFX codecs	X3D file (.x3d)	XMT file (.xmt)	COLLADA file (.dae)
AXE_Q_Ad_EG	QBCR, adaptive prediction, Exponential Golomb entropy coding	SC3DMC	N/A	N/A	axe
AXE_Q_Ad_AC	QBCR, adaptive prediction, Arithmetic coding	SC3DMC	N/A	N/A	Axe
AXE_Q_Ad_BP	QBCR, adaptive prediction, Bit precision entropy coding	SC3DMC	N/A	N/A	Axe
AXE_Q_Ad_4C	QBCR, adaptive prediction, 4-bit entropy coding	SC3DMC	N/A	N/A	Axe
AXE_Q_Xo_EG	QBCR, XOR prediction, Exponential Golomb entropy coding	SC3DMC	N/A	N/A	Axe
AXE_Q_Xo_AC	QBCR, XOR prediction, Arithmetic coding	SC3DMC	N/A	N/A	axe
AXE_Q_Xo_BP	QBCR, XOR prediction, Bit precision entropy coding	SC3DMC	N/A	N/A	Axe
AXE_Q_Xo_4C	QBCR, XOR prediction, 4-bit entropy coding	SC3DMC	N/A	N/A	Axe
AXE_Q_Di_EG	QBCR, differential prediction, Exponential Golomb entropy coding	SC3DMC	N/A	N/A	Axe
AXE_Q_Di_BP	QBCR, differential prediction, Bit precision entropy coding	SC3DMC	N/A	N/A	axe
AXE_Q_Di_4C	QBCR, differential prediction, 4-bit entropy coding	SC3DMC	N/A	N/A	Axe
AXE_S_CD_EG	SVA, circular prediction, Exponential Golomb entropy coding	SC3DMC	N/A	N/A	Axe
AXE_S_CD_AC	SVA, circular prediction, Arithmetic coding	SC3DMC	N/A	N/A	Axe
AXE_S_CD_BP	SVA, circular prediction, Bit precision entropy coding	SC3DMC	N/A	N/A	Axe
AXE_S_CD_4C	SVA, circular prediction, 4-bit entropy coding	SC3DMC	N/A	N/A	axe
AXE_S_Ad_EG	SVA, adaptive prediction, Exponential Golomb entropy coding	SC3DMC	N/A	N/A	Axe
AXE_S_Ad_AC	SVA, adaptive prediction, Arithmetic coding	SC3DMC	N/A	N/A	Axe

Name (for bitstream filename, add .mp4)	Attribute/Parameter	AFX codecs	X3D file (.x3d)	XMT file (.xmt)	COLLADA file (.dae)
AXE_S_Ad_BP	SVA, adaptive prediction, Bit precision entropy coding	SC3DMC	N/A	N/A	Axe
AXE_S_Ad_4C	SVA, adaptive prediction, 4-bit entropy coding	SC3DMC	N/A	N/A	Axe
AXE_S_Xo_EG	SVA, XOR prediction, Exponential Golomb entropy coding	SC3DMC	N/A	N/A	axe
AXE_S_Xo_AC	SVA, XOR prediction, Arithmetic coding	SC3DMC	N/A	N/A	axe
AXE_S_Xo_BP	SVA, XOR prediction, Bit precision entropy coding	SC3DMC	N/A	N/A	Axe
AXE_S_Xo_4C	SVA, XOR prediction, 4-bit entropy coding	SC3DMC	N/A	N/A	Axe
AXE_S_Di_EG	SVA, differential prediction, Exponential Golomb entropy coding	SC3DMC	N/A	N/A	Axe
AXE_S_Di_AC	SVA, differential prediction, Arithmetic coding	SC3DMC	N/A	N/A	axe
AXE_S_Di_BP	SVA, differential prediction, Bit precision entropy coding	SC3DMC	N/A	N/A	Axe
AXE_S_Di_4C	SVA, differential prediction, 4-bit entropy coding	SC3DMC	N/A	N/A	Axe
AXE_T_CD_EG	TFAN, circular prediction, Exponential Golomb entropy coding	SC3DMC	N/A	N/A	Axe
AXE_T_CD_AC	TFAN, circular prediction, Arithmetic coding	SC3DMC	N/A	N/A	Axe
AXE_T_CD_BP	TFAN, circular prediction, Bit precision entropy coding	SC3DMC	N/A	N/A	axe
AXE_T_CD_4C	TFAN, circular prediction, 4-bit entropy coding	SC3DMC	N/A	N/A	Axe
AXE_T_Ad_EG	TFAN, adaptive prediction, Exponential Golomb entropy coding	SC3DMC	N/A	N/A	Axe
AXE_T_Ad_AC	TFAN, adaptive prediction, Arithmetic coding	SC3DMC	N/A	N/A	Axe
AXE_T_Ad_BP	TFAN, adaptive prediction, Bit precision entropy coding	SC3DMC	N/A	N/A	Axe