

Universal Multiple-Octet Coded Character Set  
International Organization for Standardization  
Organisation Internationale de Normalisation  
Международная организация по стандартизации

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**Title:** Preliminary proposal to encode Proto-Cuneiform in the SMP of the UCS  
**Source:** UC Berkeley Script Encoding Initiative (Universal Scripts Project)  
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**Date:** 2016-09-25

**1. Introduction.** Proto-cuneiform is the earliest form of the cuneiform script, the earliest writing system attested in history. It emerged towards the end of the fourth millennium B.C. in ancient Babylonia, a region of Mesopotamia that corresponds with the southern part of modern-day Iraq. The signs that made up this writing system were impressed with the aid of a stylus, usually made from reed, into the still soft surface of clay tablets. These clay tablets naturally dried and hardened in the arid and hot climate, and as a result they survived in great numbers. The early version of this script developed into the later cuneiform script that became the hallmark of Mesopotamian history and culture; hence the name “proto-cuneiform” has been accepted by most scholars to designate the most archaic version of script.

The German Archaeological Institute unearthed most of the tablets of this early phase of cuneiform history during their excavations at the ancient city of Uruk in lower Babylonia between 1913 and 1967. During the seasons from 1928 until 1976, nearly 5000 tablets and fragments were discovered, forming the basis for a long-term research project dedicated to the decipherment and edition of these texts. The periods in which proto-cuneiform is attested are often referred to as the Uruk periods (e.g., Uruk V, ca. 3500-3350 BCE; Uruk IV, ca. 3350-3200 BCE; Uruk III, ca. 3200–3000 BCE), after the excavation layers to which the tablets have been assigned (all tablets and fragments were found in trash deposits outside of secure stratigraphy, but within or below Uruk III). The tablets from Uruk, however, are not the only proto-cuneiform documents known from this period. Similar tablets have been found in the northern Babylonian sites of Jemdet Nasr, Khafaje, and Tell Uqair. Although the tablets from these sites are smaller in number compared to the Uruk corpus, they have aided in the advancement of our understanding of this early period in cuneiform’s history.

**2. Basis of the repertoire and methodology.** This proposal covers the most commonly occurring 200 Proto-cuneiform lexical and administrative signs that appear within the nearly 4900 texts from the Uruk III period, including Jemdat Nasr. Of these texts, 703 are lexical texts and 4167 are administrative (the genres of the final five texts are catalogued as “legal”, “literary”, “school”, “uncertain”, and “votive”; these were not included here). All non-numerical signs, except where the numerical signs form part of a compound logogram, from these lexical and administrative texts have been included in this study.

The signs were culled from the available texts in the database of the Cuneiform Digital Library Initiative (CDLI); and although this database represents the most comprehensive corpus of proto-cuneiform texts ever put together, the signs included in these lists were checked against previous published sign lists (Green and Nissen 1987; Englund, Damerow, and Nissen 1993; Englund and Boehmer 1994).

**3. Glyphs, names, and ordering.** The glyphs were originally drawn by R. K. England.<sup>1</sup> The signs are oriented according to their counterparts' orientation in later cuneiform, as per convention. The proposed names are based on each sign's traditional name, with slight differences in order to abide by the common UCS naming conventions. The sign order is alphabetical. This coincides with the order in the published sign list of Green and Nissen (1987).

**4. Unicode Character Properties.** Character properties for the new characters are proposed here.

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12600;PROTO-CUNEIFORM SIGN A;Lo;0;L;;;;N;;;;;
12601;PROTO-CUNEIFORM SIGN AB-A;Lo;0;L;;;;N;;;;;
12602;PROTO-CUNEIFORM SIGN AB-B;Lo;0;L;;;;N;;;;;
12603;PROTO-CUNEIFORM SIGN AB2;Lo;0;L;;;;N;;;;;
12604;PROTO-CUNEIFORM SIGN ABGAL;Lo;0;L;;;;N;;;;;
12605;PROTO-CUNEIFORM SIGN AD-A;Lo;0;L;;;;N;;;;;
12606;PROTO-CUNEIFORM SIGN AGAR2;Lo;0;L;;;;N;;;;;
12607;PROTO-CUNEIFORM SIGN AK-A;Lo;0;L;;;;N;;;;;
12608;PROTO-CUNEIFORM SIGN AL;Lo;0;L;;;;N;;;;;
12609;PROTO-CUNEIFORM SIGN AMA-A;Lo;0;L;;;;N;;;;;
1260A;PROTO-CUNEIFORM SIGN AMAR;Lo;0;L;;;;N;;;;;
1260B;PROTO-CUNEIFORM SIGN AN;Lo;0;L;;;;N;;;;;
1260C;PROTO-CUNEIFORM SIGN ANSHE-B;Lo;0;L;;;;N;;;;;
1260D;PROTO-CUNEIFORM SIGN APIN-A;Lo;0;L;;;;N;;;;;
1260E;PROTO-CUNEIFORM SIGN BA;Lo;0;L;;;;N;;;;;
1260F;PROTO-CUNEIFORM SIGN BAD-A;Lo;0;L;;;;N;;;;;
12610;PROTO-CUNEIFORM SIGN BALA-A;Lo;0;L;;;;N;;;;;
12611;PROTO-CUNEIFORM SIGN BAR;Lo;0;L;;;;N;;;;;
12612;PROTO-CUNEIFORM SIGN BU-A;Lo;0;L;;;;N;;;;;
12613;PROTO-CUNEIFORM SIGN DA-A;Lo;0;L;;;;N;;;;;
12614;PROTO-CUNEIFORM SIGN DARA4-A1;Lo;0;L;;;;N;;;;;
12615;PROTO-CUNEIFORM SIGN DI;Lo;0;L;;;;N;;;;;
12616;PROTO-CUNEIFORM SIGN DIM-C;Lo;0;L;;;;N;;;;;
12617;PROTO-CUNEIFORM SIGN DIN;Lo;0;L;;;;N;;;;;
12618;PROTO-CUNEIFORM SIGN DU;Lo;0;L;;;;N;;;;;
12619;PROTO-CUNEIFORM SIGN DU6-B;Lo;0;L;;;;N;;;;;
1261A;PROTO-CUNEIFORM SIGN DUB-A;Lo;0;L;;;;N;;;;;
1261B;PROTO-CUNEIFORM SIGN DUG-A;Lo;0;L;;;;N;;;;;
1261C;PROTO-CUNEIFORM SIGN DUG-B;Lo;0;L;;;;N;;;;;
1261D;PROTO-CUNEIFORM SIGN DUG-B TIMES SIG7;Lo;0;L;;;;N;;;;;
1261E;PROTO-CUNEIFORM SIGN DUG-B TIMES X;Lo;0;L;;;;N;;;;;
1261F;PROTO-CUNEIFORM SIGN DUG-C;Lo;0;L;;;;N;;;;;
12620;PROTO-CUNEIFORM SIGN DUR2;Lo;0;L;;;;N;;;;;
12621;PROTO-CUNEIFORM SIGN E2-A;Lo;0;L;;;;N;;;;;
12622;PROTO-CUNEIFORM SIGN E2-B;Lo;0;L;;;;N;;;;;
12623;PROTO-CUNEIFORM SIGN EN-A;Lo;0;L;;;;N;;;;;
12624;PROTO-CUNEIFORM SIGN ERIM-A;Lo;0;L;;;;N;;;;;
12625;PROTO-CUNEIFORM SIGN ERIN;Lo;0;L;;;;N;;;;;
12626;PROTO-CUNEIFORM SIGN EZEN-B;Lo;0;L;;;;N;;;;;
12627;PROTO-CUNEIFORM SIGN GAAR-A1;Lo;0;L;;;;N;;;;;
12628;PROTO-CUNEIFORM SIGN GA-A;Lo;0;L;;;;N;;;;;
12629;PROTO-CUNEIFORM SIGN GA-A DOT ZATU753;Lo;0;L;;;;N;;;;;
1262A;PROTO-CUNEIFORM SIGN GA-B;Lo;0;L;;;;N;;;;;
1262B;PROTO-CUNEIFORM SIGN GA2-A1;Lo;0;L;;;;N;;;;;
1262C;PROTO-CUNEIFORM SIGN GADA-A;Lo;0;L;;;;N;;;;;
1262D;PROTO-CUNEIFORM SIGN GAL-A;Lo;0;L;;;;N;;;;;
1262E;PROTO-CUNEIFORM SIGN GAN-A;Lo;0;L;;;;N;;;;;
1262F;PROTO-CUNEIFORM SIGN GAN-B;Lo;0;L;;;;N;;;;;
12630;PROTO-CUNEIFORM SIGN GAN2;Lo;0;L;;;;N;;;;;
12631;PROTO-CUNEIFORM SIGN GAR;Lo;0;L;;;;N;;;;;
12632;PROTO-CUNEIFORM SIGN GARA2-A;Lo;0;L;;;;N;;;;;
12633;PROTO-CUNEIFORM SIGN GAZI;Lo;0;L;;;;N;;;;;
12634;PROTO-CUNEIFORM SIGN GI;Lo;0;L;;;;N;;;;;
12635;PROTO-CUNEIFORM SIGN GI AND GI;Lo;0;L;;;;N;;;;;
12636;PROTO-CUNEIFORM SIGN GI6;Lo;0;L;;;;N;;;;;
12637;PROTO-CUNEIFORM SIGN GIBIL;Lo;0;L;;;;N;;;;;
12638;PROTO-CUNEIFORM SIGN GIR2-A;Lo;0;L;;;;N;;;;;
12639;PROTO-CUNEIFORM SIGN GIR3 AT G-B;Lo;0;L;;;;N;;;;;
1263A;PROTO-CUNEIFORM SIGN GIR3-C;Lo;0;L;;;;N;;;;;
1263B;PROTO-CUNEIFORM SIGN GISH;Lo;0;L;;;;N;;;;;
1263C;PROTO-CUNEIFORM SIGN GISH2-B;Lo;0;L;;;;N;;;;;
1263D;PROTO-CUNEIFORM SIGN GISHIMMAR-B1;Lo;0;L;;;;N;;;;;
1263E;PROTO-CUNEIFORM SIGN GU;Lo;0;L;;;;N;;;;;
1263F;PROTO-CUNEIFORM SIGN GU4;Lo;0;L;;;;N;;;;;
12640;PROTO-CUNEIFORM SIGN GU7;Lo;0;L;;;;N;;;;;
12641;PROTO-CUNEIFORM SIGN GUG2;Lo;0;L;;;;N;;;;;
12642;PROTO-CUNEIFORM SIGN HAL;Lo;0;L;;;;N;;;;;

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1 Proto-cuneiform signs in postscript format (CS 4), <http://cdli.ucla.edu/?q=downloads>.

12643;PROTO-CUNEIFORM SIGN HASHHUR;Lo;0;L;;;;;N;;;;;  
12644;PROTO-CUNEIFORM SIGN HI;Lo;0;L;;;;;N;;;;;  
12645;PROTO-CUNEIFORM SIGN HI AT G-A;Lo;0;L;;;;;N;;;;;  
12646;PROTO-CUNEIFORM SIGN IB-A;Lo;0;L;;;;;N;;;;;  
12647;PROTO-CUNEIFORM SIGN IM-A;Lo;0;L;;;;;N;;;;;  
12648;PROTO-CUNEIFORM SIGN IN-B;Lo;0;L;;;;;N;;;;;  
12649;PROTO-CUNEIFORM SIGN IR-A;Lo;0;L;;;;;N;;;;;  
1264A;PROTO-CUNEIFORM SIGN ISH-B;Lo;0;L;;;;;N;;;;;  
1264B;PROTO-CUNEIFORM SIGN KA-A;Lo;0;L;;;;;N;;;;;  
1264C;PROTO-CUNEIFORM SIGN KAB;Lo;0;L;;;;;N;;;;;  
1264D;PROTO-CUNEIFORM SIGN KAK-A;Lo;0;L;;;;;N;;;;;  
1264E;PROTO-CUNEIFORM SIGN KAR2-A;Lo;0;L;;;;;N;;;;;  
1264F;PROTO-CUNEIFORM SIGN KAR2-B;Lo;0;L;;;;;N;;;;;  
12650;PROTO-CUNEIFORM SIGN KASH-A;Lo;0;L;;;;;N;;;;;  
12651;PROTO-CUNEIFORM SIGN KASH-B;Lo;0;L;;;;;N;;;;;  
12652;PROTO-CUNEIFORM SIGN KASH-C;Lo;0;L;;;;;N;;;;;  
12653;PROTO-CUNEIFORM SIGN KI;Lo;0;L;;;;;N;;;;;  
12654;PROTO-CUNEIFORM SIGN KID-B;Lo;0;L;;;;;N;;;;;  
12655;PROTO-CUNEIFORM SIGN KINGAL;Lo;0;L;;;;;N;;;;;  
12656;PROTO-CUNEIFORM SIGN KISAL-B1;Lo;0;L;;;;;N;;;;;  
12657;PROTO-CUNEIFORM SIGN KISIM-A;Lo;0;L;;;;;N;;;;;  
12658;PROTO-CUNEIFORM SIGN KISH;Lo;0;L;;;;;N;;;;;  
12659;PROTO-CUNEIFORM SIGN KISHIK-A;Lo;0;L;;;;;N;;;;;  
1265A;PROTO-CUNEIFORM SIGN KU-B1;Lo;0;L;;;;;N;;;;;  
1265B;PROTO-CUNEIFORM SIGN KU3-A;Lo;0;L;;;;;N;;;;;  
1265C;PROTO-CUNEIFORM SIGN KU6-A;Lo;0;L;;;;;N;;;;;  
1265D;PROTO-CUNEIFORM SIGN KUR-A;Lo;0;L;;;;;N;;;;;  
1265E;PROTO-CUNEIFORM SIGN LA-2;Lo;0;L;;;;;N;;;;;  
1265F;PROTO-CUNEIFORM SIGN LAGAB-A;Lo;0;L;;;;;N;;;;;  
12660;PROTO-CUNEIFORM SIGN LAGAR-A;Lo;0;L;;;;;N;;;;;  
12661;PROTO-CUNEIFORM SIGN MA;Lo;0;L;;;;;N;;;;;  
12662;PROTO-CUNEIFORM SIGN MAR-A;Lo;0;L;;;;;N;;;;;  
12663;PROTO-CUNEIFORM SIGN MASH;Lo;0;L;;;;;N;;;;;  
12664;PROTO-CUNEIFORM SIGN MASH2;Lo;0;L;;;;;N;;;;;  
12665;PROTO-CUNEIFORM SIGN ME-A;Lo;0;L;;;;;N;;;;;  
12666;PROTO-CUNEIFORM SIGN MES;Lo;0;L;;;;;N;;;;;  
12667;PROTO-CUNEIFORM SIGN MU;Lo;0;L;;;;;N;;;;;  
12668;PROTO-CUNEIFORM SIGN MUD;Lo;0;L;;;;;N;;;;;  
12669;PROTO-CUNEIFORM SIGN MUD3-A;Lo;0;L;;;;;N;;;;;  
1266A;PROTO-CUNEIFORM SIGN MUNU3;Lo;0;L;;;;;N;;;;;  
1266B;PROTO-CUNEIFORM SIGN MUSH-A;Lo;0;L;;;;;N;;;;;  
1266C;PROTO-CUNEIFORM SIGN MUSHEN;Lo;0;L;;;;;N;;;;;  
1266D;PROTO-CUNEIFORM SIGN NA-A;Lo;0;L;;;;;N;;;;;  
1266E;PROTO-CUNEIFORM SIGN NA2-A;Lo;0;L;;;;;N;;;;;  
1266F;PROTO-CUNEIFORM SIGN NAGA-A;Lo;0;L;;;;;N;;;;;  
12670;PROTO-CUNEIFORM SIGN NAGAR-A;Lo;0;L;;;;;N;;;;;  
12671;PROTO-CUNEIFORM SIGN NAGAR-B;Lo;0;L;;;;;N;;;;;  
12672;PROTO-CUNEIFORM SIGN NAM2;Lo;0;L;;;;;N;;;;;  
12673;PROTO-CUNEIFORM SIGN NAMESHDA;Lo;0;L;;;;;N;;;;;  
12674;PROTO-CUNEIFORM SIGN NAR;Lo;0;L;;;;;N;;;;;  
12675;PROTO-CUNEIFORM SIGN NE-A;Lo;0;L;;;;;N;;;;;  
12676;PROTO-CUNEIFORM SIGN NESAG2-A;Lo;0;L;;;;;N;;;;;  
12677;PROTO-CUNEIFORM SIGN NI-A;Lo;0;L;;;;;N;;;;;  
12678;PROTO-CUNEIFORM SIGN NI-A DOT RU;Lo;0;L;;;;;N;;;;;  
12679;PROTO-CUNEIFORM SIGN NI-B;Lo;0;L;;;;;N;;;;;  
1267A;PROTO-CUNEIFORM SIGN NIM-A;Lo;0;L;;;;;N;;;;;  
1267B;PROTO-CUNEIFORM SIGN NIM-B1;Lo;0;L;;;;;N;;;;;  
1267C;PROTO-CUNEIFORM SIGN NIMGIR;Lo;0;L;;;;;N;;;;;  
1267D;PROTO-CUNEIFORM SIGN NIN;Lo;0;L;;;;;N;;;;;  
1267E;PROTO-CUNEIFORM SIGN NU;Lo;0;L;;;;;N;;;;;  
1267F;PROTO-CUNEIFORM SIGN NUN-A;Lo;0;L;;;;;N;;;;;  
12680;PROTO-CUNEIFORM SIGN NUN-B;Lo;0;L;;;;;N;;;;;  
12681;PROTO-CUNEIFORM SIGN NUNUZ-A1;Lo;0;L;;;;;N;;;;;  
12682;PROTO-CUNEIFORM SIGN PA-A;Lo;0;L;;;;;N;;;;;  
12683;PROTO-CUNEIFORM SIGN PAP-A;Lo;0;L;;;;;N;;;;;  
12684;PROTO-CUNEIFORM SIGN PIRIG-B1;Lo;0;L;;;;;N;;;;;  
12685;PROTO-CUNEIFORM SIGN PU2;Lo;0;L;;;;;N;;;;;  
12686;PROTO-CUNEIFORM SIGN RAD-A;Lo;0;L;;;;;N;;;;;  
12687;PROTO-CUNEIFORM SIGN RU;Lo;0;L;;;;;N;;;;;  
12688;PROTO-CUNEIFORM SIGN SAG;Lo;0;L;;;;;N;;;;;  
12689;PROTO-CUNEIFORM SIGN SAL;Lo;0;L;;;;;N;;;;;  
1268A;PROTO-CUNEIFORM SIGN SANGA-A;Lo;0;L;;;;;N;;;;;  
1268B;PROTO-CUNEIFORM SIGN SAR-A;Lo;0;L;;;;;N;;;;;  
1268C;PROTO-CUNEIFORM SIGN SI;Lo;0;L;;;;;N;;;;;  
1268D;PROTO-CUNEIFORM SIGN SI4-F;Lo;0;L;;;;;N;;;;;  
1268E;PROTO-CUNEIFORM SIGN SIG;Lo;0;L;;;;;N;;;;;  
1268F;PROTO-CUNEIFORM SIGN SIG2-B;Lo;0;L;;;;;N;;;;;  
12690;PROTO-CUNEIFORM SIGN SIG7;Lo;0;L;;;;;N;;;;;  
12691;PROTO-CUNEIFORM SIGN SILA4-C;Lo;0;L;;;;;N;;;;;  
12692;PROTO-CUNEIFORM SIGN SU-A;Lo;0;L;;;;;N;;;;;  
12693;PROTO-CUNEIFORM SIGN SUG5;Lo;0;L;;;;;N;;;;;  
12694;PROTO-CUNEIFORM SIGN SUHUR;Lo;0;L;;;;;N;;;;;

12695;PROTO-CUNEIFORM SIGN SUKKAL;Lo;0;L;;;;;N;;;;;  
12696;PROTO-CUNEIFORM SIGN SUM-A;Lo;0;L;;;;;N;;;;;  
12697;PROTO-CUNEIFORM SIGN SHA;Lo;0;L;;;;;N;;;;;  
12698;PROTO-CUNEIFORM SIGN SHA3-A1;Lo;0;L;;;;;N;;;;;  
12699;PROTO-CUNEIFORM SIGN SHAB-A;Lo;0;L;;;;;N;;;;;  
1269A;PROTO-CUNEIFORM SIGN SHAGAN;Lo;0;L;;;;;N;;;;;  
1269B;PROTO-CUNEIFORM SIGN SHAM2;Lo;0;L;;;;;N;;;;;  
1269C;PROTO-CUNEIFORM SIGN SHE-A;Lo;0;L;;;;;N;;;;;  
1269D;PROTO-CUNEIFORM SIGN SHE-A NAM2;Lo;0;L;;;;;N;;;;;  
1269E;PROTO-CUNEIFORM SIGN SHE3;Lo;0;L;;;;;N;;;;;  
1269F;PROTO-CUNEIFORM SIGN SHITA-A1;Lo;0;L;;;;;N;;;;;  
126A0;PROTO-CUNEIFORM SIGN SHU;Lo;0;L;;;;;N;;;;;  
126A1;PROTO-CUNEIFORM SIGN SHU2;Lo;0;L;;;;;N;;;;;  
126A2;PROTO-CUNEIFORM SIGN SHUBUR;Lo;0;L;;;;;N;;;;;  
126A3;PROTO-CUNEIFORM SIGN TAK4-A;Lo;0;L;;;;;N;;;;;  
126A4;PROTO-CUNEIFORM SIGN TAR-A;Lo;0;L;;;;;N;;;;;  
126A5;PROTO-CUNEIFORM SIGN TE;Lo;0;L;;;;;N;;;;;  
126A6;PROTO-CUNEIFORM SIGN TI;Lo;0;L;;;;;N;;;;;  
126A7;PROTO-CUNEIFORM SIGN TUG2-A;Lo;0;L;;;;;N;;;;;  
126A8;PROTO-CUNEIFORM SIGN TUG2-A AT G;Lo;0;L;;;;;N;;;;;  
126A9;PROTO-CUNEIFORM SIGN TUN3-A;Lo;0;L;;;;;N;;;;;  
126AA;PROTO-CUNEIFORM SIGN TUR;Lo;0;L;;;;;N;;;;;  
126AB;PROTO-CUNEIFORM SIGN TUR3-A;Lo;0;L;;;;;N;;;;;  
126AC;PROTO-CUNEIFORM SIGN U2-A;Lo;0;L;;;;;N;;;;;  
126AD;PROTO-CUNEIFORM SIGN U2-B;Lo;0;L;;;;;N;;;;;  
126AE;PROTO-CUNEIFORM SIGN U4;Lo;0;L;;;;;N;;;;;  
126AF;PROTO-CUNEIFORM SIGN U4 TIMES ONE;Lo;0;L;;;;;N;;;;;  
126B0;PROTO-CUNEIFORM SIGN U8;Lo;0;L;;;;;N;;;;;  
126B1;PROTO-CUNEIFORM SIGN UB;Lo;0;L;;;;;N;;;;;  
126B2;PROTO-CUNEIFORM SIGN UD5-A;Lo;0;L;;;;;N;;;;;  
126B3;PROTO-CUNEIFORM SIGN UDU-A;Lo;0;L;;;;;N;;;;;  
126B4;PROTO-CUNEIFORM SIGN UDUNITA-A;Lo;0;L;;;;;N;;;;;  
126B5;PROTO-CUNEIFORM SIGN UKKIN-A;Lo;0;L;;;;;N;;;;;  
126B6;PROTO-CUNEIFORM SIGN UMUN2;Lo;0;L;;;;;N;;;;;  
126B7;PROTO-CUNEIFORM SIGN UNUG-A;Lo;0;L;;;;;N;;;;;  
126B8;PROTO-CUNEIFORM SIGN UR-A;Lo;0;L;;;;;N;;;;;  
126B9;PROTO-CUNEIFORM SIGN UR2;Lo;0;L;;;;;N;;;;;  
126BA;PROTO-CUNEIFORM SIGN UR5-A;Lo;0;L;;;;;N;;;;;  
126BB;PROTO-CUNEIFORM SIGN URI3-A;Lo;0;L;;;;;N;;;;;  
126BC;PROTO-CUNEIFORM SIGN URU-A1;Lo;0;L;;;;;N;;;;;  
126BD;PROTO-CUNEIFORM SIGN UTUA-A;Lo;0;L;;;;;N;;;;;  
126BE;PROTO-CUNEIFORM SIGN UTUL-A;Lo;0;L;;;;;N;;;;;  
126BF;PROTO-CUNEIFORM SIGN ZAG-A;Lo;0;L;;;;;N;;;;;  
126C0;PROTO-CUNEIFORM SIGN ZATU647;Lo;0;L;;;;;N;;;;;  
126C1;PROTO-CUNEIFORM SIGN ZATU659;Lo;0;L;;;;;N;;;;;  
126C2;PROTO-CUNEIFORM SIGN ZATU649-C;Lo;0;L;;;;;N;;;;;  
126C3;PROTO-CUNEIFORM SIGN ZATU737 TIMES DI;Lo;0;L;;;;;N;;;;;  
126C4;PROTO-CUNEIFORM SIGN ZATU737 TIMES SAL;Lo;0;L;;;;;N;;;;;  
126C5;PROTO-CUNEIFORM SIGN ZATU752;Lo;0;L;;;;;N;;;;;  
126C6;PROTO-CUNEIFORM SIGN ZATU753;Lo;0;L;;;;;N;;;;;  
126C7;PROTO-CUNEIFORM SIGN ZI-A;Lo;0;L;;;;;N;;;;;

**5. Acknowledgements.** This project was made possible in part by a grant from the U.S. National Endowment for the Humanities, which funded the Universal Scripts Project (part of the Script Encoding Initiative at UC Berkeley) in respect of the Proto-Cuneiform encoding. Any views, findings, conclusions or recommendations expressed in this publication do not necessarily reflect those of the National Endowment for the Humanities.

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	1260	1261	1262	1263	1264	1265	1266	1267	1268	1269	126A	126B	126C	126D	126E	126F
0																
1																
2																
3																
4																
5																
6																
7																
8																
9																
A																
B																
C																
D																
E																
F																

## Signs

12600		PROTO-CUNEIFORM SIGN A	1263D		PROTO-CUNEIFORM SIGN GISHIMMAR-B1
12601		PROTO-CUNEIFORM SIGN AB-A	1263E		PROTO-CUNEIFORM SIGN GU
12602		PROTO-CUNEIFORM SIGN AB-B	1263F		PROTO-CUNEIFORM SIGN GU4
12603		PROTO-CUNEIFORM SIGN AB2	12640		PROTO-CUNEIFORM SIGN GU7
12604		PROTO-CUNEIFORM SIGN ABGAL	12641		PROTO-CUNEIFORM SIGN GUG2
12605		PROTO-CUNEIFORM SIGN AD-A	12642		PROTO-CUNEIFORM SIGN HAL
12606		PROTO-CUNEIFORM SIGN AGAR2	12643		PROTO-CUNEIFORM SIGN HASHHUR
12607		PROTO-CUNEIFORM SIGN AK-A	12644		PROTO-CUNEIFORM SIGN HI
12608		PROTO-CUNEIFORM SIGN AL	12645		PROTO-CUNEIFORM SIGN HI AT G-A
12609		PROTO-CUNEIFORM SIGN AMA-A	12646		PROTO-CUNEIFORM SIGN IB-A
1260A		PROTO-CUNEIFORM SIGN AMAR	12647		PROTO-CUNEIFORM SIGN IM-A
1260B		PROTO-CUNEIFORM SIGN AN	12648		PROTO-CUNEIFORM SIGN IN-B
1260C		PROTO-CUNEIFORM SIGN ANSHE-B	12649		PROTO-CUNEIFORM SIGN IR-A
1260D		PROTO-CUNEIFORM SIGN APIN-A	1264A		PROTO-CUNEIFORM SIGN ISH-B
1260E		PROTO-CUNEIFORM SIGN BA	1264B		PROTO-CUNEIFORM SIGN KA-A
1260F		PROTO-CUNEIFORM SIGN BAD-A	1264C		PROTO-CUNEIFORM SIGN KAB
12610		PROTO-CUNEIFORM SIGN BALA-A	1264D		PROTO-CUNEIFORM SIGN KAK-A
12611		PROTO-CUNEIFORM SIGN BAR	1264E		PROTO-CUNEIFORM SIGN KAR2-A
12612		PROTO-CUNEIFORM SIGN BU-A	1264F		PROTO-CUNEIFORM SIGN KAR2-B
12613		PROTO-CUNEIFORM SIGN DA-A	12650		PROTO-CUNEIFORM SIGN KASH-A
12614		PROTO-CUNEIFORM SIGN DARA4-A1	12651		PROTO-CUNEIFORM SIGN KASH-B
12615		PROTO-CUNEIFORM SIGN DI	12652		PROTO-CUNEIFORM SIGN KASH-C
12616		PROTO-CUNEIFORM SIGN DIM-C	12653		PROTO-CUNEIFORM SIGN KI
12617		PROTO-CUNEIFORM SIGN DIN	12654		PROTO-CUNEIFORM SIGN KID-B
12618		PROTO-CUNEIFORM SIGN DU	12655		PROTO-CUNEIFORM SIGN KINGAL
12619		PROTO-CUNEIFORM SIGN DUG-B	12656		PROTO-CUNEIFORM SIGN KISAL-B1
1261A		PROTO-CUNEIFORM SIGN DUB-A	12657		PROTO-CUNEIFORM SIGN KISIM-A
1261B		PROTO-CUNEIFORM SIGN DUG-A	12658		PROTO-CUNEIFORM SIGN KISH
1261C		PROTO-CUNEIFORM SIGN DUG-B	12659		PROTO-CUNEIFORM SIGN KISHIK-A
1261D		PROTO-CUNEIFORM SIGN DUG-B TIMES SIG7	1265A		PROTO-CUNEIFORM SIGN KU-B1
1261E		PROTO-CUNEIFORM SIGN DUG-B TIMES X	1265B		PROTO-CUNEIFORM SIGN KU3-A
1261F		PROTO-CUNEIFORM SIGN DUG-C	1265C		PROTO-CUNEIFORM SIGN KU6-A
12620		PROTO-CUNEIFORM SIGN DUR2	1265D		PROTO-CUNEIFORM SIGN KUR-A
12621		PROTO-CUNEIFORM SIGN E2-A	1265E		PROTO-CUNEIFORM SIGN LA-2
12622		PROTO-CUNEIFORM SIGN E2-B	1265F		PROTO-CUNEIFORM SIGN LAGAB-A
12623		PROTO-CUNEIFORM SIGN EN-A	12660		PROTO-CUNEIFORM SIGN LAGAR-A
12624		PROTO-CUNEIFORM SIGN ERIM-A	12661		PROTO-CUNEIFORM SIGN MA
12625		PROTO-CUNEIFORM SIGN ERIN	12662		PROTO-CUNEIFORM SIGN MAR-A
12626		PROTO-CUNEIFORM SIGN EZEN-B	12663		PROTO-CUNEIFORM SIGN MASH
12627		PROTO-CUNEIFORM SIGN GAAR-A1	12664		PROTO-CUNEIFORM SIGN MASH2
		• ga'ar-a1	12665		PROTO-CUNEIFORM SIGN ME-A
12628		PROTO-CUNEIFORM SIGN GA-A	12666		PROTO-CUNEIFORM SIGN MES
12629		PROTO-CUNEIFORM SIGN GA-A DOT ZATU753	12667		PROTO-CUNEIFORM SIGN MU
		• ga-a.zatu753	12668		PROTO-CUNEIFORM SIGN MUD
1262A		PROTO-CUNEIFORM SIGN GA-B	12669		PROTO-CUNEIFORM SIGN MUD3-A
1262B		PROTO-CUNEIFORM SIGN GA2-A1	1266A		PROTO-CUNEIFORM SIGN MUNU3
1262C		PROTO-CUNEIFORM SIGN GADA-A	1266B		PROTO-CUNEIFORM SIGN MUSH-A
1262D		PROTO-CUNEIFORM SIGN GAL-A	1266C		PROTO-CUNEIFORM SIGN MUSHEN
1262E		PROTO-CUNEIFORM SIGN GAN-A	1266D		PROTO-CUNEIFORM SIGN NA-A
1262F		PROTO-CUNEIFORM SIGN GAN-B	1266E		PROTO-CUNEIFORM SIGN NA2-A
12630		PROTO-CUNEIFORM SIGN GAN2	1266F		PROTO-CUNEIFORM SIGN NAGA-A
12631		PROTO-CUNEIFORM SIGN GAR	12670		PROTO-CUNEIFORM SIGN NAGAR-A
12632		PROTO-CUNEIFORM SIGN GARA2-A	12671		PROTO-CUNEIFORM SIGN NAGAR-B
12633		PROTO-CUNEIFORM SIGN GAZI	12672		PROTO-CUNEIFORM SIGN NAM2
12634		PROTO-CUNEIFORM SIGN GI	12673		PROTO-CUNEIFORM SIGN NAMESHDA
12635		PROTO-CUNEIFORM SIGN GI AND GI	12674		PROTO-CUNEIFORM SIGN NAR
		• gi&gi	12675		PROTO-CUNEIFORM SIGN NES-A
12636		PROTO-CUNEIFORM SIGN GI6	12676		PROTO-CUNEIFORM SIGN NESAG2-A
12637		PROTO-CUNEIFORM SIGN GIBIL	12677		PROTO-CUNEIFORM SIGN NI-A
12638		PROTO-CUNEIFORM SIGN GIR2-A	12678		PROTO-CUNEIFORM SIGN NI-A DOT RU
12639		PROTO-CUNEIFORM SIGN GIR3 AT G-B			• ni-a.ru
		• gir3@g-b	12679		PROTO-CUNEIFORM SIGN NI-B
1263A		PROTO-CUNEIFORM SIGN GIR3-C	1267A		PROTO-CUNEIFORM SIGN NIM-A
1263B		PROTO-CUNEIFORM SIGN GISH	1267B		PROTO-CUNEIFORM SIGN NIM-B1
1263C		PROTO-CUNEIFORM SIGN GISH2-B	1267C		PROTO-CUNEIFORM SIGN NIMGIR
			1267D		PROTO-CUNEIFORM SIGN NIN
			1267E		PROTO-CUNEIFORM SIGN NU

1267F		PROTO-CUNEIFORM SIGN NUN-A	126C0		PROTO-CUNEIFORM SIGN ZATU647
12680		PROTO-CUNEIFORM SIGN NUN-B	126C1		PROTO-CUNEIFORM SIGN ZATU659
12681		PROTO-CUNEIFORM SIGN NUNUZ-A1	126C2		PROTO-CUNEIFORM SIGN ZATU649-C
12682		PROTO-CUNEIFORM SIGN PA-A	126C3		PROTO-CUNEIFORM SIGN ZATU737 TIMES DI
12683		PROTO-CUNEIFORM SIGN PAP-A	126C4		PROTO-CUNEIFORM SIGN ZATU737 TIMES SAL
12684		PROTO-CUNEIFORM SIGN PIRIG-B1	126C5		PROTO-CUNEIFORM SIGN ZATU752
12685		PROTO-CUNEIFORM SIGN PU2	126C6		PROTO-CUNEIFORM SIGN ZATU753
12686		PROTO-CUNEIFORM SIGN RAD-A	126C7		PROTO-CUNEIFORM SIGN ZI-A
12687		PROTO-CUNEIFORM SIGN RU			
12688		PROTO-CUNEIFORM SIGN SAG			
12689		PROTO-CUNEIFORM SIGN SAL			
1268A		PROTO-CUNEIFORM SIGN SANGA-A			
1268B		PROTO-CUNEIFORM SIGN SAR-A			
1268C		PROTO-CUNEIFORM SIGN SI			
1268D		PROTO-CUNEIFORM SIGN SI4-F			
1268E		PROTO-CUNEIFORM SIGN SIG			
1268F		PROTO-CUNEIFORM SIGN SIG2-B			
12690		PROTO-CUNEIFORM SIGN SIG7			
12691		PROTO-CUNEIFORM SIGN SILA4-C			
12692		PROTO-CUNEIFORM SIGN SU-A			
12693		PROTO-CUNEIFORM SIGN SUG5			
12694		PROTO-CUNEIFORM SIGN SUHUR			
12695		PROTO-CUNEIFORM SIGN SUKKAL			
12696		PROTO-CUNEIFORM SIGN SUM-A			
12697		PROTO-CUNEIFORM SIGN SHA			
12698		PROTO-CUNEIFORM SIGN SHA3-A1			
12699		PROTO-CUNEIFORM SIGN SHAB-A			
1269A		PROTO-CUNEIFORM SIGN SHAGAN			
1269B		PROTO-CUNEIFORM SIGN SHAM2			
1269C		PROTO-CUNEIFORM SIGN SHE-A			
1269D		PROTO-CUNEIFORM SIGN SHE-A NAM2			
		• she-a.nam2			
1269E		PROTO-CUNEIFORM SIGN SHE3			
1269F		PROTO-CUNEIFORM SIGN SHITA-A1			
126A0		PROTO-CUNEIFORM SIGN SHU			
126A1		PROTO-CUNEIFORM SIGN SHU2			
126A2		PROTO-CUNEIFORM SIGN SHUBUR			
126A3		PROTO-CUNEIFORM SIGN TAK4-A			
126A4		PROTO-CUNEIFORM SIGN TAR-A			
126A5		PROTO-CUNEIFORM SIGN TE			
126A6		PROTO-CUNEIFORM SIGN TI			
126A7		PROTO-CUNEIFORM SIGN TUG2-A			
126A8		PROTO-CUNEIFORM SIGN TUG2-A AT G			
		• tug2-a@g			
126A9		PROTO-CUNEIFORM SIGN TUN3-A			
126AA		PROTO-CUNEIFORM SIGN TUR			
126AB		PROTO-CUNEIFORM SIGN TUR3-A			
126AC		PROTO-CUNEIFORM SIGN U2-A			
126AD		PROTO-CUNEIFORM SIGN U2-B			
126AE		PROTO-CUNEIFORM SIGN U4			
126AF		PROTO-CUNEIFORM SIGN U4 TIMES ONE			
126B0		PROTO-CUNEIFORM SIGN U8			
126B1		PROTO-CUNEIFORM SIGN UB			
126B2		PROTO-CUNEIFORM SIGN UD5-A			
126B3		PROTO-CUNEIFORM SIGN UDU-A			
126B4		PROTO-CUNEIFORM SIGN UDUNITA-A			
126B5		PROTO-CUNEIFORM SIGN UKKIN-A			
126B6		PROTO-CUNEIFORM SIGN UMUN2			
126B7		PROTO-CUNEIFORM SIGN UNUG-A			
126B8		PROTO-CUNEIFORM SIGN UR-A			
126B9		PROTO-CUNEIFORM SIGN UR2			
126BA		PROTO-CUNEIFORM SIGN UR5-A			
126BB		PROTO-CUNEIFORM SIGN URI3-A			
126BC		PROTO-CUNEIFORM SIGN URU-A1			
126BD		PROTO-CUNEIFORM SIGN UTUA-A			
126BE		PROTO-CUNEIFORM SIGN UTUL-A			
126BF		PROTO-CUNEIFORM SIGN ZAG-A			



## A. Administrative

1. Title

**Preliminary proposal to encode Proto-Cuneiform in the SMP of the UCS**

2. Requester's name

**UC Berkeley Script Encoding Initiative (Universal Scripts Project)**

3. Requester type (Member body/Liaison/Individual contribution)

**Liaison contribution.**

4. Submission date

**2016-09-25**

5. Requester's reference (if applicable)

6. Choose one of the following:

6a. This is a complete proposal

**No.**

6b. More information will be provided later

**Yes.**

## B. Technical – General

1. Choose one of the following:

1a. This proposal is for a new script (set of characters)

**Yes.**

1b. Proposed name of script

**Proto-Cuneiform.**

1c. The proposal is for addition of character(s) to an existing block

**No**

1d. Name of the existing block

2. Number of characters in proposal

**200.**

3. Proposed category (A-Contemporary; B.1-Specialized (small collection); B.2-Specialized (large collection); C-Major extinct; D-Attested extinct; E-Minor extinct; F-Archaic Hieroglyphic or Ideographic; G-Obscure or questionable usage symbols)

**Category F.**

4a. Is a repertoire including character names provided?

**Yes.**

4b. If YES, are the names in accordance with the “character naming guidelines” in Annex L of P&P document?

**Yes.**

4c. Are the character shapes attached in a legible form suitable for review?

**Yes.**

5a. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard?

**Michael Everson.**

5b. If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used:

**Michael Everson, Fontographer.**

6a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?

**Yes.**

6b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?

**No.**

7. Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)?

**Yes.**

8. Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at <http://www.unicode.org> for such information on other scripts. Also see Unicode Character Database <http://www.unicode.org/Public/UNIDATA/UnicodeCharacterDatabase.html> and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

**See above.**

## C. Technical – Justification

1. Has this proposal for addition of character(s) been submitted before? If YES, explain.

**No.**

2a. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?

**Yes.**

2b. If YES, with whom?

**Steve Tinney.**

2c. If YES, available relevant documents

3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?

**Sumerologists.**

4a. The context of use for the proposed characters (type of use; common or rare)

**Used historically and in modern editions.**

4b. Reference

5a. Are the proposed characters in current use by the user community?

**Yes.**

5b. If YES, where?

**Scholarly publications.**

6a. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?

**No.**

6b. If YES, is a rationale provided?

6c. If YES, reference

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?

**No.**

8a. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?

**No.**

8b. If YES, is a rationale for its inclusion provided?

8c. If YES, reference

9a. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?

**No.**

9b. If YES, is a rationale for its inclusion provided?

9c. If YES, reference

10a. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?

**No.**

10b. If YES, is a rationale for its inclusion provided?

10c. If YES, reference

11a. Does the proposal include use of combining characters and/or use of composite sequences (see clauses 4.12 and 4.14 in ISO/IEC 10646-1: 2000)?

**No.**

11b. If YES, is a rationale for such use provided?

11c. If YES, reference

11d. Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?

**No.**

11e. If YES, reference

12a. Does the proposal contain characters with any special properties such as control function or similar semantics?

**No.**

12b. If YES, describe in detail (include attachment if necessary)

13a. Does the proposal contain any Ideographic compatibility character(s)?

**No.**

13b. If YES, is the equivalent corresponding unified ideographic character(s) identified?