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INDEPENDENT ASSURANCE REPORT

To the management of eMudhra Technologies Limited and eMudhra Inc ("emSign PKI"):

Scope

We have been engaged, in a reasonable assurance engagement, to report on emSign PKI management's assertion that in generating and protecting its Root and Subordinate CAs witnessed enumerated in **Appendix A**, (collectively, "emSign PKI") on 19 February 2018 at Bangalore, Karnataka, India.

emSign PKI has, in accordance with CA Key Generation Criterion 4.1 of the WebTrust Principles and Criteria for Certification Authorities v2.1,:

- followed the CA key generation and protection requirements in its:
  - emSign PKI Certificate Policy & Certificate Practice Statement (CP/CPS) v1.01;
- included appropriate, detailed procedures and controls in its Root and Subordinate CA Key Generation Scripts:
  - Key Ceremony Steps For Root Key, v1.00, 19 February 2018; and
  - Key Ceremony Steps For Subordinate CA Key, v1.01, 19 February 2018;
- maintained effective controls to provide reasonable assurance that the emSign PKI Root CAs and Subordinate CAs were generated and protected in conformity with the procedures described in its CP/CPS and its CA Key Generation Scripts;
- performed, during the root and subordinate CA key generation process, all procedures required by the Key Generation Scripts;
- generated the CA keys in a physically secured environment as described in its CP/CPS;
- generated the CA keys using personnel in trusted roles under multiple person control and split knowledge; and
- generated the CA keys within cryptographic modules meeting the applicable technical and business requirements as disclosed in its CP/CPS.

Certification authority's responsibilities

emSign PKI's management is responsible for these assertions, including the fairness of their presentation and for generating and protecting its CA keys in accordance with CA Key Generation Criterion 4.1 of the WebTrust Principles and Criteria for Certification Authorities v2.1.

Our independence and quality control

We have complied with the relevant rules of professional conduct / code of ethics applicable to the practice of public accounting and related to assurance engagements, issued by various professional accounting bodies, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies the Canadian Standard on Quality Control 1 and, accordingly, maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Auditor's responsibilities

Our responsibilities is to express an opinion on management's assertions based on our procedures. We conducted our procedures in accordance with Canadian Standard on Assurance Engagements 3000, *Attestation Engagements Other than Audits or Review of Historical Financial Information*, set out in the CPA Canada Handbook - Assurance. This standard requires that we plan and perform our procedures to obtain reasonable assurance about whether, in all material respects, management's assertions are fairly stated, and, accordingly, included:

(1) obtaining an understanding of emSign PKI's documented plan of procedures to be performed for the generation of the certification authority key pairs for the emSign PKI Root CAs and Subordinate CAs;

(2) reviewing the detailed CA key generation scripts for conformance with industry standard practices;

(3) testing and evaluating, during the CA key generation process, the effectiveness of controls over the integrity, confidentiality, and availability of all private keys, including back-up copies, and access keys (including physical keys, tokens, and passwords), used in the establishment of the service;

(4) physical observation of all procedures performed during the root and subordinate CA key generation process to ensure that the procedures actually performed on 19 February 2018 were in accordance with the Root and Subordinate CA Key Generation Scripts for the emSign PKI's Root and Subordinate CAs; and

(5) performing such other procedures as we considered necessary in the circumstances.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, as of 26 February 2018, emSign PKI management's assertion, as referred to above is fairly stated, in all materials respects, in accordance with CA Key Generation Criterion 4.1 of the WebTrust Pinciples and Criteria for Certification Authorities v2.1.

This report does not include any representation as to the quality of emSign PKI's services beyond those covered by the CA Key Generation Criterion 4.1 of the WebTrust Principles and Criteria for Certification Authorities v2.1, nor the suitability of any emSign PKI's services for any customer's intended purpose.

BDO Consulting Sdn. Bhd.

Kuala Lumpur, Malaysia

26 February 2018

Appendix A: Root and Subordinate CAs in Scope

No	Common Name	Certificate Serial No	Subject Key Identifier	SHA-256 Fingerprint
1	**emSign Root CA - G1**	31F5E4620C6C58EDD6D8	FB:EF:0D:86:9E:B0:E3:DD:A9:B9:F1:21:17:7F:3E:FC:F0:77:2B:1A	40:F6:AF:03:46:A9:9A:A1:CD:1D:55:5A:4E:9C:CE:62:C7:F9:63:46:03:EE:40:66:15:83:3D:C8:C8:D0:03:67
2	emSign SSL CA - G1	217AD58B1C713C002091	34:D1:F7:39:32:45:40:4A:99:2B:7D:89:6A:57:69:AD:95:AF:E3:37	47:B2:EF:BC:36:70:E7:DB:4B:41:F2:2C:51:FC:02:EE:84:FB:2D:BF:30:82:A4:9F:2C:26:88:12:2E:92:10:A1
3	emSign EV SSL CA - G1	626CB92B237FF82E3F50	B2:9D:CF:41:A7:E9:C3:E0:85:56:40:98:4B:F6:8F:7C:55:29:E7:7E	43:34:EE:B2:CC:11:4F:82:BE:E6:F8:A7:E5:AE:A0:3A:42:EB:2E:1F:70:CB:D6:61:02:E4:14:D7:2F:00:33:B9
4	emSign Class 1 CA - G1	00D59B7C9B36A2D44922EA	DC:60:8F:0A:DE:B1:99:84:9B:84:40:03:E3:75:03:32:03:80:00:90	CF:6D:03:33:D0:BE:2C:69:A4:2D:45:39:60:DE:E9:E1:09:D9:E8:84:3E:A3:06:1A:16:71:D6:EA:F8:5E:B7:D8
5	emSign Class 2 CA - G1	3C5BDA55C0A236A744CD	E6:DD:0D:B9:9B:D2:15:40:CF:23:08:2D:6C:19:B8:5C:68:32:52:32	63:A8:36:9D:C8:24:A4:2B:C7:AE:6E:E5:D2:6A:AF:D3:2D:F4:AF:67:7C:A1:8B:94:1B:7A:57:E3:3B:1E:35:59
6	emSign Class 3 CA - G1	00A08870825A326BED9611	5C:A5:9C:41:EF:6E:41:61:46:79:2C:DF:D8:55:45:05:D5:A7:1A:86	42:DA:1C:56:2F:80:E4:6D:A7:A3:21:24:4E:FC:23:D0:FA:A9:FE:BB:B7:AA:03:77:D9:6B:42:D9:E8:8A:B2:00
7	emSign Device CA - G1	0465835247364A904A8E	0B:93:78:E2:E0:35:07:6D:DF:86:77:8F:8C:51:8D:E3:35:7C:A9:77	4C:91:98:B6:73:55:08:58:79:9A:D2:74:4C:C0:83:C1:BA:00:27:E7:7D:3B:8F:D6:D5:6C:F5:36:20:D0:99:E2
8	**emSign Root CA - G2**	00864DBF0FE35ED77D8ED8	ED:EC:4D:45:61:18:28:E7:B3:23:28:11:1C:4D:A5:27:0D:5E:EC:F4	1A:A0:C2:70:9E:83:1B:D6:E3:B5:12:9A:00:BA:41:F7:EE:EF:02:08:72:F1:E6:50:4B:F0:F6:C3:F2:4F:3A:F3
9	emSign CS CA - G2	00C084E666596139A1FA9B	15:86:CA:B6:74:96:17:48:58:34:82:2C:CD:D2:E1:75:9E:AF:44:B7	C2:E4:D1:76:50:05:D5:CA:36:1D:40:0A:43:4B:43:03:6D:BC:93:1E:C6:D7:B9:9C:17:BE:C0:30:CC:74:CA:7D
10	emSign EV CS CA - G2	3CA9F3D18C08E50959D5	47:95:C9:61:C0:B0:6A:44:10:2F:1A:35:DA:58:B0:96:AA:F6:4B:8E	69:E2:44:8C:5F:03:EE:DE:5E:C2:C9:07:EF:E9:6C:3D:33:AD:67:9B:49:CD:29:C3:8C:51:82:32:31:21:BE:FF

11	emSign Time Stamping CA - G2	00BA9E35E51ECFAC6C4740	C0:0F:C1:F7:CF:9E:26:FF:8B:71:4A:CB:EC:F6:09:9F:2E:FA:C4:A1	C3:BE:06:C6:B0:A9:23:34:42:31:80:E9:5E:A1:E6:83:AA:B9:C3:B7:D0:F5:CB:8A:4F:51:FB:C1:00:6F:3D:C0
12	**emSign ECC Root CA - G3**	3CF607A968700EDA8B84	7C:5D:02:84:13:D4:CC:8A:9B:81:CE:17:1C:2E:29:1E:9C:48:63:42	86:A1:EC:BA:08:9C:4A:8D:3B:BE:27:34:C6:12:BA:34:1D:81:3E:04:3C:F9:E8:A8:62:CD:5C:57:A3:6B:BE:6B
13	emSign ECC SSL CA - G3	72DDC7E9DCE9B0DCFFC7	13:8D:4C:28:99:E1:62:B7:D2:E0:53:E3:18:D1:62:DC:1C:CA:66:FA	6B:51:D1:DC:F4:EB:7A:EE:42:41:85:CB:1B:95:80:57:4B:39:CB:96:38:63:DE:3E:C1:AD:31:DD:B0:76:CE:9F
14	emSign ECC EV SSL CA - G3	01FE3E6C68DEBBEC263E	D1:AA:B4:D2:D2:25:82:4E:B3:F0:93:60:17:4A:9B:63:7A:F9:1F:0D	01:16:F1:7F:97:CD:EF:4A:DE:2E:63:CF:2C:1B:06:4F:D9:9F:40:4D:2B:91:41:00:BC:24:1F:07:81:85:33:23
15	emSign ECC CS CA - G3	35CF922FB9008249F89C	E6:1A:AE:5A:79:8C:D0:28:4D:37:E0:9E:6B:C5:2D:5D:B4:6C:F8:EB	0D:68:69:A2:B4:F5:DF:77:A6:AF:B0:34:22:5E:9B:EF:34:57:43:CF:30:6E:DF:36:EE:35:B9:D0:5A:FA:D8:9C
16	emSign ECC EV CS CA - G3	23BA23AB486AE7D5C0FE	FA:5C:F7:B7:49:4D:5D:6B:F0:32:28:E1:E5:D5:AD:FA:FA:D5:BC:83	0B:AD:A9:79:B7:14:02:FE:86:06:96:03:2C:F4:0E:9D:2A:3F:41:CC:B5:D0:3B:E3:3F:BB:94:A8:0D:7F:FC:7C
17	emSign ECC Class 1 CA - G3	00FB1E21982EB1B55C5925	46:BE:80:C3:C8:27:FE:EC:9B:58:2B:1A:62:5D:B2:D5:D1:02:38:68	AB:A6:A6:5D:CE:89:55:BA:F0:68:5A:B8:88:09:B7:69:9C:17:44:96:EF:9E:E9:91:53:32:51:49:4F:43:CE:10
18	emSign ECC Class 2 CA - G3	23E1BA02DFF3E900EDDD	E0:16:FE:BD:C4:E1:65:C6:A5:99:4C:89:5E:71:8E:D4:5D:67:F1:FD	4E:9B:73:15:67:17:7E:17:76:A9:6D:66:D9:12:0B:3D:EB:28:B8:00:93:7E:A4:66:25:65:B3:EF:5E:C8:00:0B
19	emSign ECC Class 3 CA - G3	00B8EB258324DB08ACC2F5	22:62:4A:BC:7E:6D:A1:30:B7:2A:C9:95:7E:2A:23:DE:3D:27:F3:8D	70:66:A0:F4:2F:53:0E:0D:B5:AF:EE:72:A3:B0:4D:E6:14:E7:D2:30:5C:67:D1:2C:75:6B:B2:15:E3:7C:B9:75
20	emSign ECC Time stamping CA - G3	0084A863D6F61818464D34	F1:DD:23:B0:F4:F1:1D:EB:24:35:64:63:3C:10:A9:D9:54:8F:08:3F	C4:22:AB:86:C1:72:9E:88:9F:BC:AF:5C:D7:3F:21:7E:03:C2:9F:E2:AC:50:21:2F:45:13:07:D9:15:86:9F:47
21	emSign ECC Device CA - G3	00876282A8FD758C391EC3	A5:AC:F9:1F:5A:25:8E:10:B0:29:DA:19:00:26:86:E8:A1:E6:E8:D9	70:B9:BA:59:54:12:CF:86:14:B7:67:47:FD:68:3C:CA:27:59:F4:26:42:16:48:34:FB:EF:DD:88:50:5C:4F:1C
22	**emSign Root CA - C1**	00AECF00BAC4CF32F843B2	FE:A1:E0:70:1E:2A:03:39:52:5	12:56:09:AA:30:1D:A0:A2:49:B9:7A:8

			A:42:BE:5C:91:85:7A:18:AA:4D:B5	2:39:CB:6A:34:21:6F:44:DC:AC:9F:39:54:B1:42:92:F2:E8:C8:60:8F
23	emSign SSL CA - C1	0086766B7F96DF60C46F8B	FC:C5:15:40:F1:AF:4F:13:B2:98:F2:71:0E:63:15:37:D1:94:6B:74	F9:1A:AC:A0:E4:E5:33:74:7A:08:80:BF:CF:6F:26:72:0D:C1:D0:54:94:C3:93:8D:A6:80:22:90:D5:A0:9B:32
24	emSign EV SSL CA - C1	00BADFD29B3F1E678C6960	C9:71:16:45:43:3B:16:5E:5F:46:FD:EE:35:4D:44:7B:7D:AE:75:07	F6:F1:59:28:6A:14:01:DE:53:97:E2:1A:00:90:53:4A:85:F5:E7:B9:F9:8F:D4:A5:A4:7B:1D:FF:D4:BF:DE:D4
25	emSign Class 1 CA - C1	7E065336C075C7998B63	3B:0E:EF:29:3B:11:48:29:2C:01:15:D1:8E:7B:79:69:05:7B:C9:52	0E:F7:B8:63:FA:AB:C3:84:A6:94:FF:63:2D:AA:F9:BD:31:CE:D2:3E:92:46:55:9A:59:EC:D7:47:27:54:CC:E6
26	emSign Class 2 CA - C1	1A5C82DEDCBC6A153030	26:68:C0:F3:FC:40:1C:F7:CA:12:4B:4F:92:C3:8B:14:94:48:3B:FD	05:B3:0B:3F:C4:4F:85:75:33:4B:D8:12:EF:9F:A8:A5:2A:75:74:3E:19:BC:35:A5:BE:39:12:EC:A6:2C:46:69
27	emSign Class 3 CA - C1	00B474F64D86392189496E	7B:9E:A6:C5:27:7E:64:97:AB:84:01:3A:EA:26:96:6B:92:4E:87:E1	69:B0:DD:09:B9:8F:36:A9:CC:7B:D7:FF:E8:A0:0D:CD:31:9A:5F:C9:47:C9:C8:AF:72:C9:28:94:D8:E8:10:92
28	emSign Device CA - C1	00B19BE3081E2D97B5BFCB	92:C5:7C:AD:63:20:E5:4C:23:CF:69:11:CF:A7:87:FB:81:F4:91:F8	D0:34:B1:87:51:BE:E1:0A:AA:F9:4C:2F:14:35:0D:3F:65:4E:5B:93:4D:0D:DA:59:2B:31:E5:81:87:A4:89:52
29	**emSign Root CA - C2**	2F0AB76B0DCB4AAF2758	B3:F7:8A:A4:D6:0F:88:00:59:E8:51:17:4F:D5:7E:EC:86:22:81:9D	46:CD:08:3B:47:E8:04:02:02:8D:F4:93:96:0E:A1:9C:85:FE:85:19:50:D5:16:5F:1C:7D:A4:FA:A9:51:E2:F8
30	emSign CS CA - C2	00B4E6BA3BE4B674A36434	9A:42:64:A2:E0:62:94:95:C8:12:C3:0F:D5:7E:46:7C:41:2A:B2:2A	B0:E6:BB:9D:6E:7A:94:BC:4A:6B:89:D9:67:43:43:8D:2C:56:5D:BB:0A:69:7A:BB:21:45:7A:CA:22:A1:3C:E4
31	emSign EV CS CA - C2	00AE0882F16DBA80375653	5B:9F:D5:1A:1D:04:3E:61:B6:65:17:B8:B0:E9:F5:85:F5:48:2D:17	02:49:98:10:12:10:64:4F:68:FA:E9:11:55:43:A5:E6:D2:6A:6D:B0:D2:C1:03:66:FF:2D:5B:B5:05:D8:87:2D
32	emSign Time Stamping CA - C2	63720D6AB070BF2A157D	C1:41:93:9D:9D:EF:34:CC:72:FD:D8:40:A6:1E:D6:B7:2A:43:AA:E9	57:1F:C7:06:54:AB:8C:1A:A3:B4:A2:61:A3:D5:05:FA:E1:0B:C4:55:8F:A1:7C:72:84:9B:6B:98:BC:84:5C:AE
33	**emSign ECC Root CA - C3**	7B71B68256B8127C9CA8	FB:5A:48:D0:80:20:40:F2:A8:E9:00:07:69:19:77:A7:E6:C3:F4:	BC:4D:80:9B:15:18:9D:78:DB:3E:1D:8C:F4:F9:72:6A:79:5D:A1:64:3C:A5:F1:

			CF	35:8E:1D:DB:0E:DC:0D:7E:B3
34	emSign ECC SSL CA - C3	5B7D9BB1FD33B9BC1D84	E3:E8:97:1E:BF:C4:3D:3A:B0:DC:F7:1D:9D:3F:5F:2C:B1:6D:EB:6C	A0:61:D4:45:39:97:14:C3:8F:C1:01:A6:E9:AF:BD:B3:81:F1:12:FA:5D:E7:D5:BC:14:90:45:58:D1:ED:32:76
35	emSign ECC EV SSL CA - C3	1B50581F7334B30B2723	48:B7:68:E8:3C:B2:E6:B1:12:44:4C:C4:D7:D3:9A:0B:6F:E9:5A:C6	C0:A5:78:F2:10:9E:6F:42:D3:D9:39:94:8D:EE:AB:72:9B:20:F7:B2:3B:42:37:AB:D8:49:4D:F5:54:CF:98:5C
36	emSign ECC CS CA - C3	00B8973C4278609F2AF2A4	74:BF:90:17:0E:A3:70:6E:3C:53:C9:CC:01:51:2E:5B:A7:80:80:BB	A3:AF:D7:23:75:C1:D7:A8:33:0E:62:D5:77:E1:35:81:B7:23:32:C8:06:2D:FA:9C:F3:9E:51:AE:65:08:85:82
37	emSign ECC EV CS CA - C3	6004C5E20B62FDD48C46	A7:6A:A4:7D:5D:0E:18:02:D1:3E:EE:04:D6:DF:21:C7:3A:23:61:9C	CB:21:09:79:92:40:20:97:03:37:AE:32:DA:5C:3F:98:1A:9E:05:71:4E:C2:2B:B1:C3:42:1F:E6:95:E5:15:7A
38	emSign ECC Class 1 CA - C3	00BD6A0796AB3F8955521E	8C:D9:9F:A0:21:35:3E:FC:B4:3A:99:6C:2E:F2:0A:29:6F:F0:EC:92	FA:D2:E9:86:49:F1:C6:06:15:0F:55:26:9E:BC:03:5A:EA:22:FF:AC:13:1D:E6:4B:A6:90:0C:75:D8:44:7B:7E
39	emSign ECC Class 2 CA - C3	00D1142766698BFCDEDA02	56:4C:89:B8:25:C8:98:EE:BD:F2:7C:62:2D:AE:69:39:3A:B6:17:2C	DB:45:91:F8:78:F6:67:2F:5B:70:73:3A:66:AD:7C:95:37:B9:7E:6F:0A:F5:CA:49:AA:B8:EC:B2:CE:02:F8:6B
40	emSign ECC Class 3 CA - C3	3D12A1CF78258D580854	F1:66:AB:96:8C:A4:0D:D2:26:62:33:2F:9A:55:09:5D:D9:E6:48:4A	5A:9A:03:F2:D3:FE:58:9B:E6:3C:DA:11:82:0A:9F:25:F0:74:C9:20:34:F5:1C:04:7D:34:22:6D:25:2E:C0:25
41	emSign ECC Time stamping CA - C3	00B94B49C6436D72090201	0B:BF:47:0B:3D:65:F5:4E:73:4C:1C:AD:1E:4E:67:52:09:2D:26:BD	71:D2:EE:4D:DA:25:1D:92:44:F7:CE:7C:6D:47:8E:C5:52:D4:24:EF:71:9F:02:B7:10:30:F2:82:1B:6B:C8:53
42	emSign ECC Device CA - C3	00D9365F15842A1D0689C3	04:F6:54:AF:2E:B4:DD:A7:44:1E:CA:F0:63:9C:24:15:43:58:2F:CF	3D:45:11:D0:A8:0A:A9:49:A6:D9:9B:25:3A:17:34:71:79:7C:44:59:18:7A:63:29:E7:36:C3:7C:B5:49:3E:46

emSign PKI MANAGEMENT'S ASSERTION

eMudhra Technologies Limited and eMudhra Inc. ("emSign PKI") has deployed a public key infrastructure. As part of this deployment, it was necessary to create a hierarchy consistent of Root CAs and Subordinate CAs known as enumerated in Appendix A (collectively, "emSign PKI"). These CA's will serve as Root CAs and Subordinate CAs for client certificate services. In order to allow the CA's to be installed in a final production configuration, a Root CA and Subordinate CA Key Generation Ceremony was conducted, the purpose of which was to formally witness and document the creation of the CA's private signing key. This helps assure the non-refutability of the integrity of the emSign PKI Root and Subordinate CA's key pairs, and in particular, the private signing keys.

emSign PKI management has securely generated key pairs, each consisting of a public and private key, in support of its CA operations. The key pairs were generated in accordance with procedures described in emSign PKI's Certificate Policy & Certificate Practice Statement (CP/CPS), and its Root and Subordinate CA Key Generation Scripts, which are in accordance with CA Key Generation Criterion 4.1 of the WebTrust Principles and Criteria for Certification Authorities v2.1.

emSign PKI management established and maintained effective controls over the generation of these keys. These controls were designed to provide reasonable assurance of adherence to the above-mentioned practices throughout the root and subordinate CA key generation process.

emSign PKI management is responsible for establishing and maintaining procedures over its CA root and subordinate key generations, and over the integrity and confidentiality of all private keys and access keys (including physical keys, tokens, and passwords) used in the establishment of the emSign PKI Root and Subordinate CAs, and for the CA environmental controls relevant to the generation and protection of its CA keys.

emSign PKI management has assessed the procedures and controls for the generation of the CA keys. Based on that assessment, in management's opinion, in generation and protecting its CA keys for the emSign PKI Root and Subordinate CA's on 19 February 2017 at Bangalore, Karnataka, India with the identifying information enumerated in Appendix A.

emSign PKI has, in accordance with CA Key Generation Criterion 4.1 of the WebTrust Principles and Criteria for Certification Authorities v2.1,:

- followed the CA key generation and protection requirements in its:
  - emSign PKI Certificate Policy & Certificate Practice Statement (CP/CPS) v1.01;
- included appropriate, detailed procedures and controls in its Root and Subordinate CA Key Generation Scripts:

  - Key Ceremony Steps For Root Key, v1.00, 19 February 2018; and
  - Key Ceremony Steps For Subordinate CA Key, v1.01, 19 February 2018; and
- maintained effective controls to provide reasonable assurance that the emSign PKI Root and Subordinate CAs were generated and protected in conformity with the procedures described in its CP/CPS and its CA Key Generation Scripts;
- performed, during the root and subordinate CA key generation process, all procedures required by the Key Generation Scripts;
- generated the CA keys in a physically secured environment as described in its CP/CPS;
- generated the CA keys using personnel in trusted roles under multiple person control and split knowledge; and
- generated the CA keys within cryptographic modules meeting the applicable technical and business requirements as disclosed in its CP/CPS.

Vijay Kumar M

Senior Vice President - Head of Technology

26 February 2018

Appendix A: Root and Subordinate CAs in Scope

No	Common Name	Certificate Serial No	Subject Key Identifier	SHA-256 Fingerprint
1	**emSign Root CA - G1**	31F5E4620C6C58EDD6D8	FB:EF:0D:86:9E:B0:E3:DD:A9:B9:F1:21:17:7F:3E:FC:F0:77:2B:1A	40:F6:AF:03:46:A9:9A:A1:CD:1D:55:5A:4E:9C:CE:62:C7:F9:63:46:03:EE:40:66:15:83:3D:C8:C8:D0:03:67
2	emSign SSL CA - G1	217AD58B1C713C002091	34:D1:F7:39:32:45:40:4A:99:2B:7D:89:6A:57:69:AD:95:AF:E3:37	47:B2:EF:BC:36:70:E7:DB:4B:41:F2:2C:51:FC:02:EE:84:FB:2D:BF:30:82:A4:9F:2C:26:88:12:2E:92:10:A1
3	emSign EV SSL CA - G1	626CB92B237FF82E3F50	B2:9D:CF:41:A7:E9:C3:E0:85:56:40:98:4B:F6:8F:7C:55:29:E7:7E	43:34:EE:B2:CC:11:4F:82:BE:E6:F8:A7:E5:AE:A0:3A:42:EB:2E:1F:70:CB:D6:61:02:E4:14:D7:2F:00:33:B9
4	emSign Class 1 CA - G1	00D59B7C9B36A2D44922EA	DC:60:8F:0A:DE:B1:99:84:9B:84:40:03:E3:75:03:32:03:80:00:90	CF:6D:03:33:D0:BE:2C:69:A4:2D:45:39:60:DE:E9:E1:09:D9:E8:84:3E:A3:06:1A:16:71:D6:EA:F8:5E:B7:D8
5	emSign Class 2 CA - G1	3C5BDA55C0A236A744CD	E6:DD:0D:B9:9B:D2:15:40:CF:23:08:2D:6C:19:B8:5C:68:32:52:32	63:A8:36:9D:C8:24:A4:2B:C7:AE:6E:E5:D2:6A:AF:D3:2D:F4:AF:67:7C:A1:8B:94:1B:7A:57:E3:3B:1E:35:59
6	emSign Class 3 CA - G1	00A08870825A326BED9611	5C:A5:9C:41:EF:6E:41:61:46:79:2C:DF:D8:55:45:05:D5:A7:1A:86	42:DA:1C:56:2F:80:E4:6D:A7:A3:21:24:4E:FC:23:D0:FA:A9:FE:BB:B7:AA:03:77:D9:6B:42:D9:E8:8A:B2:00
7	emSign Device CA - G1	0465835247364A904A8E	0B:93:78:E2:E0:35:07:6D:DF:86:77:8F:8C:51:8D:E3:35:7C:A9:77	4C:91:98:B6:73:55:08:58:79:9A:D2:74:4C:C0:83:C1:BA:00:27:E7:7D:3B:8F:D6:D5:6C:F5:36:20:D0:99:E2
8	**emSign Root CA - G2**	00864DBF0FE35ED77D8ED8	ED:EC:4D:45:61:18:28:E7:B3:23:28:11:1C:4D:A5:27:0D:5E:EC:F4	1A:A0:C2:70:9E:83:1B:D6:E3:B5:12:9A:00:BA:41:F7:EE:EF:02:08:72:F1:E6:50:4B:F0:F6:C3:F2:4F:3A:F3
9	emSign CS CA - G2	00C084E666596139A1FA9B	15:86:CA:B6:74:96:17:48:58:34:82:2C:CD:D2:E1:75:9E:AF:44:B7	C2:E4:D1:76:50:05:D5:CA:36:1D:40:0A:43:4B:43:03:6D:BC:93:1E:C6:D7:B9:9C:17:BE:C0:30:CC:74:CA:7D
10	emSign EV CS CA - G2	3CA9F3D18C08E50959D5	47:95:C9:61:C0:B0:6A:44:10:2F:1A:35:	69:E2:44:8C:5F:03:EE:DE:5E:C2:C9:07:EF:E9:6C:3

			DA:58:B0:96:AA:F6:4B:8E	D:33:AD:67:9B:49:CD:29:C3:8C:51:82:32:31:21:BE:FF
11	emSign Time Stamping CA - G2	00BA9E35E51ECFAC6C4740	C0:0F:C1:F7:CF:9E:26:FF:8B:71:4A:CB:EC:F6:09:9F:2E:FA:C4:A1	C3:BE:06:C6:B0:A9:23:34:42:31:80:E9:5E:A1:E6:83:AA:B9:C3:B7:D0:F5:CB:8A:4F:51:FB:C1:00:6F:3D:C0
12	**emSign ECC Root CA - G3**	3CF607A968700EDA8B84	7C:5D:02:84:13:D4:CC:8A:9B:81:CE:17:1C:2E:29:1E:9C:48:63:42	86:A1:EC:BA:08:9C:4A:8D:3B:BE:27:34:C6:12:BA:34:1D:81:3E:04:3C:F9:E8:A8:62:CD:5C:57:A3:6B:BE:6B
13	emSign ECC SSL CA - G3	72DDC7E9DCE9B0DCFFC7	13:8D:4C:28:99:E1:62:B7:D2:E0:53:E3:18:D1:62:DC:1C:CA:66:FA	6B:51:D1:DC:F4:EB:7A:EE:42:41:85:CB:1B:95:80:57:4B:39:CB:96:38:63:DE:3E:C1:AD:31:DD:B0:76:CE:9F
14	emSign ECC EV SSL CA - G3	01FE3E6C68DEBBEC263E	D1:AA:B4:D2:D2:25:82:4E:B3:F0:93:60:17:4A:9B:63:7A:F9:1F:0D	01:16:F1:7F:97:CD:EF:4A:DE:2E:63:CF:2C:1B:06:4F:D9:9F:40:4D:2B:91:41:00:BC:24:1F:07:81:85:33:23
15	emSign ECC CS CA - G3	35CF922FB9008249F89C	E6:1A:AE:5A:79:8C:D0:28:4D:37:E0:9E:6B:C5:2D:5D:B4:6C:F8:EB	0D:68:69:A2:B4:F5:DF:77:A6:AF:B0:34:22:5E:9B:EF:34:57:43:CF:30:6E:DF:36:EE:35:B9:D0:5A:FA:D8:9C
16	emSign ECC EV CS CA - G3	23BA23AB486AE7D5C0FE	FA:5C:F7:B7:49:4D:5D:6B:F0:32:28:E1:E5:D5:AD:FA:FA:D5:BC:83	0B:AD:A9:79:B7:14:02:FE:86:06:96:03:2C:F4:0E:9D:2A:3F:41:CC:B5:D0:3B:E3:3F:BB:94:A8:0D:7F:FC:7C
17	emSign ECC Class 1 CA - G3	00FB1E21982EB1B55C5925	46:BE:80:C3:C8:27:FE:EC:9B:58:2B:1A:62:5D:B2:D5:D1:02:38:68	AB:A6:A6:5D:CE:89:55:BA:F0:68:5A:B8:88:09:B7:69:9C:17:44:96:EF:9E:E9:91:53:32:51:49:4F:43:CE:10
18	emSign ECC Class 2 CA - G3	23E1BA02DFF3E900EDDD	E0:16:FE:BD:C4:E1:65:C6:A5:99:4C:89:5E:71:8E:D4:5D:67:F1:FD	4E:9B:73:15:67:17:7E:17:76:A9:6D:66:D9:12:0B:3D:EB:28:B8:00:93:7E:A4:66:25:65:B3:EF:5E:C8:00:0B
19	emSign ECC Class 3 CA - G3	00B8EB258324DB08ACC2F5	22:62:4A:BC:7E:6D:A1:30:B7:2A:C9:95:7E:2A:23:DE:3D:27:F3:8D	70:66:A0:F4:2F:53:0E:0D:B5:AF:EE:72:A3:B0:4D:E6:14:E7:D2:30:5C:67:D1:2C:75:6B:B2:15:E3:7C:B9:75
20	emSign ECC Time stamping CA - G3	0084A863D6F61818464D34	F1:DD:23:B0:F4:F1:1D:EB:24:35:64:63:3C:10:A9:D9:54:8F:08:3F	C4:22:AB:86:C1:72:9E:88:9F:BC:AF:5C:D7:3F:21:7E:03:C2:9F:E2:AC:50:21:2F:45:13:07:D9:15:86:9F:47

21	emSign ECC Device CA - G3	00876282A8FD758C391EC3	A5:AC:F9:1F:5A:25:8E:10:B0:29:DA:19:00:26:86:E8:A1:E6:E8:D9	70:B9:BA:59:54:12:CF:86:14:B7:67:47:FD:68:3C:CA:27:59:F4:26:42:16:48:34:FB:EF:DD:88:50:5C:4F:1C
22	**emSign Root CA - C1**	00AECF00BAC4CF32F843B2	FE:A1:E0:70:1E:2A:03:39:52:5A:42:BE:5C:91:85:7A:18:AA:4D:B5	12:56:09:AA:30:1D:A0:A2:49:B9:7A:82:39:CB:6A:34:21:6F:44:DC:AC:9F:39:54:B1:42:92:F2:E8:C8:60:8F
23	emSign SSL CA - C1	0086766B7F96DF60C46F8B	FC:C5:15:40:F1:AF:4F:13:B2:98:F2:71:0E:63:15:37:D1:94:6B:74	F9:1A:AC:A0:E4:E5:33:74:7A:08:80:BF:CF:6F:26:72:0D:C1:D0:54:94:C3:93:8D:A6:80:22:90:D5:A0:9B:32
24	emSign EV SSL CA - C1	00BADFD29B3F1E678C6960	C9:71:16:45:43:3B:16:5E:5F:46:FD:EE:35:4D:44:7B:7D:AE:75:07	F6:F1:59:28:6A:14:01:DE:53:97:E2:1A:00:90:53:4A:85:F5:E7:B9:F9:8F:D4:A5:A4:7B:1D:FF:D4:BF:DE:D4
25	emSign Class 1 CA - C1	7E065336C075C7998B63	3B:0E:EF:29:3B:11:48:29:2C:01:15:D1:8E:7B:79:69:05:7B:C9:52	0E:F7:B8:63:FA:AB:C3:84:A6:94:FF:63:2D:AA:F9:BD:31:CE:D2:3E:92:46:55:9A:59:EC:D7:47:27:54:CC:E6
26	emSign Class 2 CA - C1	1A5C82DEDCBC6A153030	26:68:C0:F3:FC:40:1C:F7:CA:12:4B:4F:92:C3:8B:14:94:48:3B:FD	05:B3:0B:3F:C4:4F:85:75:33:4B:D8:12:EF:9F:A8:A5:2A:75:74:3E:19:BC:35:A5:BE:39:12:EC:A6:2C:46:69
27	emSign Class 3 CA - C1	00B474F64D86392189496E	7B:9E:A6:C5:27:7E:64:97:AB:84:01:3A:EA:26:96:6B:92:4E:87:E1	69:B0:DD:09:B9:8F:36:A9:CC:7B:D7:FF:E8:A0:0D:CD:31:9A:5F:C9:47:C9:C8:AF:72:C9:28:94:D8:E8:10:92
28	emSign Device CA - C1	00B19BE3081E2D97B5BFCB	92:C5:7C:AD:63:20:E5:4C:23:CF:69:11:CF:A7:87:FB:81:F4:91:F8	D0:34:B1:87:51:BE:E1:0A:AA:F9:4C:2F:14:35:0D:3F:65:4E:5B:93:4D:0D:DA:59:2B:31:E5:81:87:A4:89:52
29	**emSign Root CA - C2**	2F0AB76B0DCB4AAF2758	B3:F7:8A:A4:D6:0F:88:00:59:E8:51:17:4F:D5:7E:EC:86:22:81:9D	46:CD:08:3B:47:E8:04:02:02:8D:F4:93:96:0E:A1:9C:85:FE:85:19:50:D5:16:5F:1C:7D:A4:FA:A9:51:E2:F8
30	emSign CS CA - C2	00B4E6BA3BE4B674A36434	9A:42:64:A2:E0:62:94:95:C8:12:C3:0F:D5:7E:46:7C:41:2A:B2:2A	B0:E6:BB:9D:6E:7A:94:BC:4A:6B:89:D9:67:43:43:8D:2C:56:5D:BB:0A:69:7A:BB:21:45:7A:CA:22:A1:3C:E4

31	emSign EV CS CA - C2	00AE0882F16DBA80375653	5B:9F:D5:1A:1D:04:3E:61:B6:65:17:B8:B0:E9:F5:85:F5:48:2D:17	02:49:98:10:12:10:64:4F:68:FA:E9:11:55:43:A5:E6:D2:6A:6D:B0:D2:C1:03:66:FF:2D:5B:B5:05:D8:87:2D
32	emSign Time Stamping CA - C2	63720D6AB070BF2A157D	C1:41:93:9D:9D:EF:34:CC:72:FD:D8:40:A6:1E:D6:B7:2A:43:AA:E9	57:1F:C7:06:54:AB:8C:1A:A3:B4:A2:61:A3:D5:05:FA:E1:0B:C4:55:8F:A1:7C:72:84:9B:6B:98:BC:84:5C:AE
33	**emSign ECC Root CA - C3**	7B71B68256B8127C9CA8	FB:5A:48:D0:80:20:40:F2:A8:E9:00:07:69:19:77:A7:E6:C3:F4:CF	BC:4D:80:9B:15:18:9D:78:DB:3E:1D:8C:F4:F9:72:6A:79:5D:A1:64:3C:A5:F1:35:8E:1D:DB:0E:DC:0D:7E:B3
34	emSign ECC SSL CA - C3	5B7D9BB1FD33B9BC1D84	E3:E8:97:1E:BF:C4:3D:3A:B0:DC:F7:1D:9D:3F:5F:2C:B1:6D:EB:6C	A0:61:D4:45:39:97:14:C3:8F:C1:01:A6:E9:AF:BD:B3:81:F1:12:FA:5D:E7:D5:BC:14:90:45:58:D1:ED:32:76
35	emSign ECC EV SSL CA - C3	1B50581F7334B30B2723	48:B7:68:E8:3C:B2:E6:B1:12:44:4C:C4:D7:D3:9A:0B:6F:E9:5A:C6	C0:A5:78:F2:10:9E:6F:42:D3:D9:39:94:8D:EE:AB:72:9B:20:F7:B2:3B:42:37:AB:D8:49:4D:F5:54:CF:98:5C
36	emSign ECC CS CA - C3	00B8973C4278609F2AF2A4	74:BF:90:17:0E:A3:70:6E:3C:53:C9:CC:01:51:2E:5B:A7:80:80:BB	A3:AF:D7:23:75:C1:D7:A8:33:0E:62:D5:77:E1:35:81:B7:23:32:C8:06:2D:FA:9C:F3:9E:51:AE:65:08:85:82
37	emSign ECC EV CS CA - C3	6004C5E20B62FDD48C46	A7:6A:A4:7D:5D:0E:18:02:D1:3E:EE:04:D6:DF:21:C7:3A:23:61:9C	CB:21:09:79:92:40:20:97:03:37:AE:32:DA:5C:3F:98:1A:9E:05:71:4E:C2:2B:B1:C3:42:1F:E6:95:E5:15:7A
38	emSign ECC Class 1 CA - C3	00BD6A0796AB3F8955521E	8C:D9:9F:A0:21:35:3E:FC:B4:3A:99:6C:2E:F2:0A:29:6F:F0:EC:92	FA:D2:E9:86:49:F1:C6:06:15:0F:55:26:9E:BC:03:5A:EA:22:FF:AC:13:1D:E6:4B:A6:90:0C:75:D8:44:7B:7E
39	emSign ECC Class 2 CA - C3	00D1142766698BFCDEDA02	56:4C:89:B8:25:C8:98:EE:BD:F2:7C:62:2D:AE:69:39:3A:B6:17:2C	DB:45:91:F8:78:F6:67:2F:5B:70:73:3A:66:AD:7C:95:37:B9:7E:6F:0A:F5:CA:49:AA:B8:EC:B2:CE:02:F8:6B
40	emSign ECC Class 3 CA - C3	3D12A1CF78258D580854	F1:66:AB:96:8C:A4:0D:D2:26:62:33:2F:9A:55:09:5D:D9:E6:48:4A	5A:9A:03:F2:D3:FE:58:9B:E6:3C:DA:11:82:0A:9F:25:F0:74:C9:20:34:F5:1C:04:7D:34:22:6D:25:2E:C0:25

41	emSign ECC Time stamping CA - C3	00B94B49C6436D72090201	0B:BF:47:0B:3D:65:F5:4E:73:4C:1C:AD:1E:4E:67:52:09:2D:26:BD	71:D2:EE:4D:DA:25:1D:92:44:F7:CE:7C:6D:47:8E:C5:52:D4:24:EF:71:9F:02:B7:10:30:F2:82:1B:6B:C8:53
42	emSign ECC Device CA - C3	00D9365F15842A1D0689C3	04:F6:54:AF:2E:B4:DD:A7:44:1E:CA:F0:63:9C:24:15:43:58:2F:CF	3D:45:11:D0:A8:0A:A9:49:A6:D9:9B:25:3A:17:34:71:79:7C:44:59:18:7A:63:29:E7:36:C3:7C:B5:49:3E:46