国家重点研发计划

国家质量基础设施体系 重点专项

2022年度项目申报指南

(征求意见稿)

2022年 2月

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“ ”

2022

2022 45

1

2

3 4 5

10

*

38 40

.

.

X

6

0.5V

0.15eV 1550

90% 1550 X

8eV 5.9 eV

5 10^{-8} ba L/ 3Pa

4 10^{8} 1

$10^{-28}A^{2}/H$ 10

.

1 1

5 90%

1 5

1 2 8%

1 8%

6 10% 2

10%

3 10%

1

2000 / 1 2

.

.

HDR

4K/8K 150%NTSC

HDR

6500K

99% 5

98%

97%

80 120 f 20c *20c /

3 20

3

. *

5G

5G 5G

5G

5G

5G

5G

5G 5G

OPC UA P f e 3

/ 1 5G

5G

1 1dB 5G

0.5dB 5G

1

2.97Gb / 0.05UI

0.05UI 10

5G 2

5G 10 /

.

1

5 20

10% 15%

1

1

10%

1

2 3

5

.

HPC AI

/

PCIe/CXL/I f ba d AI

PCIe/CXL/I f ba d

3

1

15

.

1

9 H 40GH 98%

2 1

50H 50GH 1000V/ 20% 80%

120 1

80MH 40GH 120dB 1

50 / 3

12 3

3

.

1

400 7

1

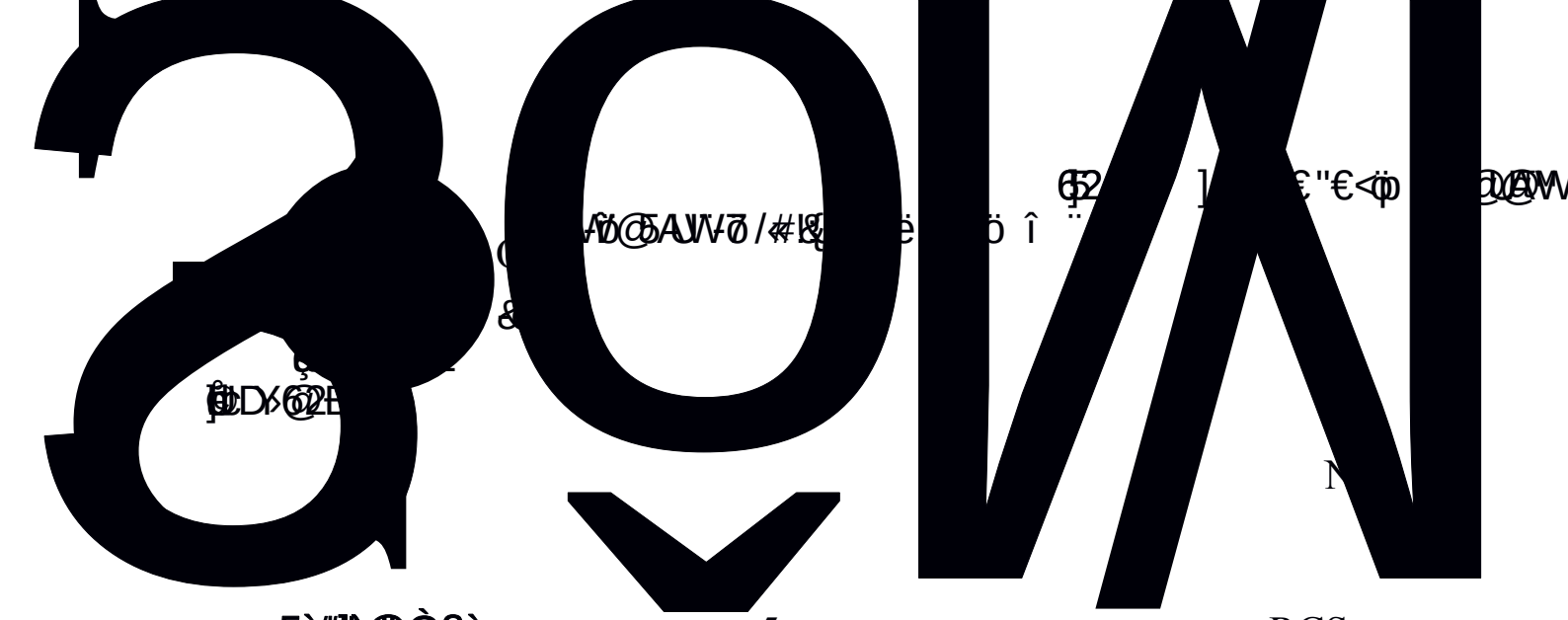
7

3

1

.

RCS



5 RCS

0.15dB 0.05%

0.75%lic PÐ"• OTA 0.6 6

0.75dB

0.6 6 GH 10%

1 3

1

1 15

20

1

100 /

5 1

1

1

SAE

5

.

20

1 ERP

5dB

2

100 -15 +20 90

30 1

4

2 30

1 3 / 4

20

. 0

X CT

10

200 1

3 / 95%

1

/ 5

1

1 1

10 5

.

.

1

600 2 /

1 +2 10^{-9}

2 20

6 10^{-10}

=2 0.2 2 +3 10^{-9} =2

3 2

4

4 28

5

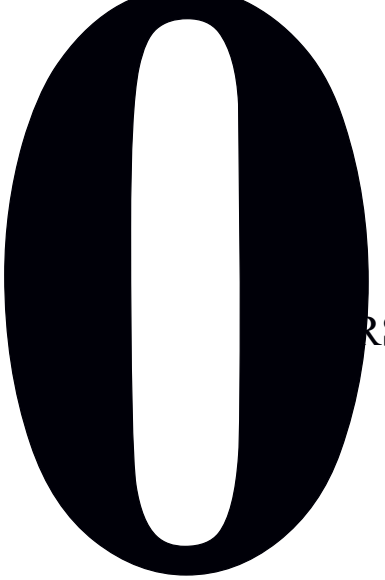
3000 8

4 24

X000

. *

1 5



8 0.2%FS

RSD 5%

6 0.2%FS

95%

5

10

20

5 1 1

5 10

.

0.5% C+100aF 1.5

10MH 50GH 6 4

.

3

1 3

50

1 3 50

1 100

100 /

3 3

.

2

6

3

/

2 6

1 2

.

12

12

1 1.8V 5V 18V 40V

1 12

BCD 15 -50 125 40V

LDMOS 60V

5000V 1

1

/

5 1

3

2

.

2 110 220 GH 2%

1 1 110

GH 1 DC 220GH

3 0.5

1 1

1 1 S

30% 1H 50GH

1 110dB 5G

/

3 10

.

600 1400

1 1 50 W

1% 6

4 1.5

1.5 1 5

3:1 10%

0.05 / 1

2 2

2 5

.

.

ECMO

8 ECMO 1

500 8000 L/ MPE 3%

1 300 1000 L MPE 6% 1

1% 6% MPE 0.3%+0.05

1 MPE 2%

1 MPE 0.2

1 1 V 1 V MPE 5% 1 0.1 Pa

1 MPE 2%

5 5 3

.

1 3000 1

/ 0 80 L/

0.1L/ 0 50 /

1 2 10

100 g/g 85%

1 100

2 20 5

1

1

5%

3%

2 0.5%

1 2 1 2

1 2

1 1

1 2% 0.1 5

.

1

200 3

100 1

50

94%

30 / AI

PB

/

3 10 2000

2

10%

. *

SI

CO_2 CO_2

CO_2 CH_4 2

0.05% 2

0.5% CO_2 1 0.1%

CO_2 1 1%

1 30%

1 1 20

1 30%

1000 1

4 4

20% / 1

4

4 6

.

1

0.01 0.2 L/ 1% 1%

20

1 g/ g 1

13 / 5

3

10

.

NQI

1 10

1 1

15 5

5 6 5

.

SAR

BIM

1

0 10 20

1

900MH 4GH 16dB 29.6

1

5 95% /

2 5

.

KANO

5

1 3000

30

9

5

1 2

10

5

1

.

.

NQI

15

1 2

12 5

2 1

1 5

30

.

1 1

30 99%

1

10 1 2

1

1

8 1 500

1

5

1 6 /

17 11

.

20MeV

^{3}H ^{133}Xe

^{137}C ^{110}Ag ^{109}Cd

C^{-} SO_4^{2-} TN

5

5% 10%

X 5% ^{3}H ^{133}Xe

1.5% ^{110}Ag

1.3% / 3

2 3

(CMC)5 3

.

2000 1

95%

1 110

100MPa 0.001N

3

.

3

1 1

3

1 4 500

100 2

6

2

1 3 2 2000

5000

3 10

. *

/

5 1

6 0.25 K 10

0.2 K 1

0.8% 1

0.25dB@ 10 500 H 0 5 MPa 4 30

1 0.04dB/ @ 4 30 0.30dB/MPa@ 0 5

MPa 1 1 Ga

3H 1 10 Ga

1 10 g

1 10^{-6} 5 10^{-6} /

3 3

.

.

0.005

0.005

45H 1 H 30 500 V 10 A 120A /

1.0 10^{-4} 2.5 10^{-5}

200 V 1 V 3.0 10^{-6} 1.9 10^{-6}

200 A 20A 2.1 10^{-4} 7.0 10^{-6} 2 2G

1.0 10^{-3} 4.2 10^{-6} 1H 1MH 200 V 1 V

1.0 10^{-2} 4.3 10^{-5} 1H 10 H 200 A 20A

2.2 10^{-3} 2.0 10^{-4}

300 PV10 /500 RMS

/3000

PV10 /15 PV10

/20 PV10 /100

632.8 / 3

12

.

0.1 /h 0.1"

4 10^{-6} /h 1h

1

10

0.05 3 10^{-9}

.

X

3C 3D X

X 3D

X 3D

X 30c ^{2}/V

0.1 A 100dB

3.94 / 250 300

2000 2400 30FPS X

40 150 V X

3D 1

3D 30 / @300 300

3D 8

1

X

2 10

.

3

1 -20

15

3 3

10

10 5

4 5000

50 10 5

.

.

5G

1

3%

X

12 8%

ISO/IEC 1 2 /

5 10

/ 5 2 10

.

SCADA

SCADA

150 100

1

20%

1

30 5%

1

5% / 5

.

3

2 5 3000

2 10

1

10 1 3

1 5

3000 1

1 3

3 5 1

10

.

/

5G AI

10

/

10 30 80%

6

90%

8

6 1

10

10 3

.

NQI NQI

NQI

5 4 10

2 1