

भारत सरकार  
Government of India  
इलेक्ट्रॉनिकी और सूचना प्रौद्योगिकी मंत्रालय  
Ministry of Electronics & Information Technology  
इलेक्ट्रॉनिक्स निकेतन, 6, सी जी ओ कॉम्प्लेक्स, नई दिल्ली-110003  
Electronics Niketan, 6, C G O Complex, New Delhi-110003  
Website: www.meity.gov.in

संख्या

No.....36(24)/2016-IPHW (Vol. IV)

दिनांक

Date.....13<sup>th</sup> December, 2017

**Dr. Anant Sardeshmukh**

Director

M/s MCCIA Electronic Cluster Foundation

505, A Wing, MCCIA Trade Tower, ICC Complex

403, Senapati Bapat Road, Pune-411016

Maharashtra

**Subject: Electronics Manufacturing Clusters (EMC) Scheme- Final approval for Common Facility Centre in Brownfield Electronics Manufacturing Cluster at Plot No. J/P-8, J 462 and J 462/P, Pimpri Industrial Area, Pune, Maharashtra.**

References:

- Final application submitted vide letter dated 30<sup>th</sup> April, 2016 and subsequent clarification/ documents submitted by M/s MCCIA Electronic Cluster Foundation
- EMC Policy Gazette Notification no. 252 dated 22<sup>nd</sup> October, 2012 [F.No.8(50)/2011 – IPHW]
- Guidelines for operationalization of EMC Scheme dated 15<sup>th</sup> April, 2013 [F.No.8 (50)/2011– IPHW]
- Guidelines for constitution of SPV dated 30<sup>th</sup> January 2014 [F.No.8(131)/2012-IPHW]

Sir,

Reference is invited to final application submitted vide letter dated 30<sup>th</sup> April, 2016 and communications/documents submitted thereafter for seeking grant assistance under Electronics Manufacturing Cluster (EMC) Scheme from this Ministry for setting up of Common Facility Centre (CFC) in Brownfield Electronics Manufacturing Cluster (EMC) at Plot No. J/P-8, J 462 and J 462/P, Pimpri Industrial Area, Pune, Maharashtra. The said application and documents submitted by you have been considered by the Ministry of Electronics and Information Technology (MeitY) and on the basis of the assurances and commitments made therein, I am directed to convey the approval of the competent authority for setting up of Common Facility Centre (CFC) in Brownfield Electronics Manufacturing Cluster (EMC) over an area of 0.61 acres at Plot No. J/P-8, J 462 and J 462/P, Pimpri Industrial Area, Pune, Maharashtra with a project cost of ₹ 67,00,10,449/- (₹ Sixty Seven Crore Ten Thousand Four Hundred and Forty Nine only) [excluding land cost] providing Grant-in-aid of ₹ 50,00,00,000/- (₹ Fifty Crore only) .

2. The parameters of the project are mentioned hereunder. The area mentioned below is being notified as a Common Facility Centre (CFC) in Brownfield Electronics Manufacturing Cluster under the EMC Scheme of MeitY.

#	Project Parameter(s)	Details
1.	<b>Name of the Applicant</b>	M/s MCCIA Electronic Cluster Foundation (MECF)-(SPV)
2.	<b>Location of CFC</b>	Plot No. J/P-8, J 462 and J 462/P, Pimpri Industrial Area, Pune, Maharashtra
3	<b>Type of Cluster</b>	Common Facility Centre (CFC) in Brownfield EMC
4.	<b>Area of CFC</b>	0.61 acres
5	<b>Facilities to be developed within the CFC</b>	<ul style="list-style-type: none"> <li>• Design Centre and Rapid Prototyping</li> <li>• Test and Measurement Lab</li> <li>• Surface Mount Technology (SMT) Line</li> <li>• EMI/EMC Lab</li> <li>• Environmental Testing and Certification Lab</li> </ul>
6	<b>Timelines for formation of SPV</b>	SPV has already been constituted and would be restructured in line with the SPV Guidelines immediately after issuance of the final approval
6.	<b>Project Timeline</b>	12 months from the date of final approval

### **TERMS AND CONDITIONS**

3. This approval and Grant-in-aid is subject to compliance by SPV M/s MCCIA Electronic Cluster Foundation to the EMC Scheme and Guidelines and other instructions, orders etc. issued by Government of India from time to time, and the terms and conditions stipulated hereinafter. Capitalized terms used in this letter shall have the meaning ascribed to such terms in **Annexure A** of this letter.

4. The Grant-in-aid has been approved on basis of the eligible activities, break-up of project cost and funding pattern approved by the competent authority under the Electronics Manufacturing Clusters Scheme which is provided in the table hereunder. The SPV undertakes to comply with the eligible activities, break-up of project cost and funding pattern as provided herein.





(Amount in ₹)

S.No.	Project Component(s)	Unit	Area (Sq. m)	Rate/Sq.m	Amount
<b>A</b>	<b>Infrastructure Work</b>				
A.1	Dismantling brick masonry in lime or cement mortar	Sq.m	80	974	77,486
A.2	Civil Work	Sq.m	4,760	18,493	8,80,32,752
A.3	Chrome Plated fittings & Sanitary Fittings	Sq.m	4,760	159	7,55,078
A.4	Drainage System	Sq.m	4,760	61	2,90,723
A.5	Water Supply System	Sq.m	4,760	48	2,26,325
A.6	External Drainage & Storm System	Sq.m	4,760	90	4,29,553
A.7	Rain Water Harvesting	Sq.m	4,760	16	75,302
A.8	Pumping System	Sq.m	4,760	11	52,665
A.9	Electrical Works	Sq.m	4,760	1,126	53,62,416
A.10	Firefighting System	Sq.m	4,760	451	21,46,305
A.11	HVAC (3 Tonne AC)	LS			21,46,471
A.12	UPS (15000 VA 360 V 12000 Watt)	LS			5,44,505
A.13	Interior & Furniture Works	Sq.m	4,760	253	12,05,577
A.14	Water Coolers	No's	3	25,000	75,000
A.15	Landscaping	Sq.m	794	665	5,28,000
A.16	Passenger lift (13 persons, speed 1.5m/sec)	No's	3	16,66,667	50,00,000
	<b>Sub Total (A)</b>				<b>10,69,48,158</b>
<b>B</b>	<b>Equipment (As per Annexure -C)</b>				
B.1	Design Center & Rapid Prototyping				8,72,45,761
B.2	Test & Measurement Lab				8,51,11,458
B.3	SMT Line				3,40,34,150
B.4	EMI/EMC Lab				21,41,91,070
B.5	Environmental Test & Certification Lab				13,12,80,072
	<b>Sub Total (B)</b>				<b>55,18,62,510</b>
<b>C</b>	<b>Administrative Expenses</b>				<b>1,11,99,781</b>
	<b>Grand Total (A+B+C)</b>				<b>67,00,10,449</b>





5. The details of the project cost and Grant-in-aid for the Project approved by the competent authority under the Electronics Manufacturing Clusters Scheme are as provided in table hereunder. The SPV undertakes to comply with the project cost as provided herein.

(Amount in ₹)

S.No.	Parameter	Area (In acre)	Project Cost	Grant-in-aid (from Gol)
1	Processing area	0.61	65,88,10,668	49,16,42,085
2	Administrative expenses	-	1,11,99,781	83,57,915
	<b>Total</b>	<b>0.61</b>	<b>67,00,10,449</b>	<b>50,00,00,000</b>

6. The details of funding for the project approved by the competent authority under the Electronics Manufacturing Clusters Scheme are as provided in the table hereunder. The SPV undertakes to ensure the contribution from Cluster enterprises/ units to the tune of ₹10,30,09,404/-.

(Amount in ₹)

#	Funding Sources	Amount
1	Grant- in-aid from Government of India	50,00,00,000
2	Contribution from State Government	6,70,01,045
3	Contribution from Constituent Units	10,30,09,404
	<b>Total</b>	<b>67,00,10,449</b>

**7. Implementation schedule:** The project components wise implementation schedule for the project approved by the competent authority under the Electronics Manufacturing Clusters Scheme is as provided hereunder. The SPV undertakes to implement the project within the approved timelines. In the event of considerable and persistent delay of the project, Government of India has the right to foreclose the project, appoint a new implementation agency for execution of the project and recover the entire Grant-in-aid released along with interest and penalties as stipulated in this approval letter.

(a) **Total duration of the project** – 12 months

(b) **Project Component-wise timeline:**

Particulars	Timeline
Civil Works	2 Months (1 <sup>st</sup> Month-2 <sup>nd</sup> Month)
Infrastructure & Building –Design and drawing	1 Month (1 <sup>st</sup> Month)
Engineering Survey and studies	2 Month (1 <sup>st</sup> Month-2 <sup>nd</sup> Month)
Design of Infrastructure Facilities	2 Month (1 <sup>st</sup> Month-2 <sup>nd</sup> Month)
Design of CFC and administrative Block	1 month (2 <sup>nd</sup> Month)
Construction	7 Month (3 <sup>rd</sup> Month-10 <sup>th</sup> Month)
Site Clearance Grading & Set out	1 month (3 <sup>rd</sup> Month)
Roads and Storm Water Drainage	2 month (3 <sup>rd</sup> Month -4 <sup>th</sup> Month)
Water Supply , Sewerage and STP	2 Months (4 <sup>th</sup> Month -6 <sup>th</sup> Month)
CFC & Administrative Block	6 Month (3 <sup>rd</sup> Month -9 <sup>th</sup> Month)
Electrical Works	2 Months (9 <sup>th</sup> Month -10 <sup>th</sup> Month)
Machinery	5 Months (8 <sup>th</sup> Month -12 <sup>th</sup> Month)
Project Completion	12 Months



8. SPV shall ensure that it is restructured in full compliance of terms and conditions laid out in the '*Guidelines for constitution of Special Purpose Vehicle (SPV) for implementation of Electronics Manufacturing Clusters (EMCs)*' dated 30<sup>th</sup> January 2014 and Electronics Manufacturing Cluster Scheme, the Guidelines and any other instructions issued by MeitY from time to time. In the event of failing to comply with the conditions laid out in EMC Scheme and/ or Guidelines including the utilization of land or committing breach of the bond at any time, SPV shall be liable to refund to the President of India the entire amount of the Grant-in-aid with interest @ Prime Lending Rate (PLR) per annum prevailing at that time and as notified by Reserve Bank of India. SPV will also be liable to such other penalties as provided under the approval and any other law. MeitY may also take legal action for recovery of the dues as may be considered appropriate.
9. SPV shall execute a bond for proper utilization of grant wherein it shall undertake that it shall abide by the terms and conditions specified in the approval letter, the terms of the Scheme and Guidelines and any instruction issued by the Ministry of Electronics and Information Technology from time to time. SPV shall also be required to provide a Self-certified undertaking that they have not obtained or applied for grants for the same purpose or activity from any other Ministry or Department of the Government of India or State Government. In the event of failing to comply with the conditions laid out in EMC Scheme and/ or Guidelines including the utilization of land or committing breach of the bond at any time, SPV shall be liable to refund to the President of India the entire amount of the Grant-in-aid with interest @ Prime Lending Rate (PLR) per annum prevailing at that time and as notified by Reserve Bank of India and will be liable to such other penalties as provided under the approval and any other law. MeitY may also take legal action for recovery of the dues as may be considered appropriate.
10. SPV shall create an Escrow account with a Nationalized Bank and shall provide the details thereof to the Ministry of Electronics and Information Technology (MeitY), Government of India. The Government of India shall enter into a Tripartite Agreement (TPA) with the SPV and the Bank where the escrow account of SPV is maintained for proper utilization of the central grant. The terms of the escrow account shall be as approved by the Government of India.
11. The disbursement of Grant-in-aid shall be made on *pari-passu* basis i.e. all proportionate payments to be released after the corresponding share to be mobilized by SPV and is deposited in the escrow account and other necessary conditions for release of such payments as prescribed have been complied. The same is to be applicable on all the installments with effect from the first installment to be released to the SPV.
12. The SPV shall also undertake to abide by all terms & conditions as stipulated in EMC scheme, Guidelines and other terms and conditions issued in this approval letter. Failure to abide by any of the above will make liable for penalties as envisaged under the Policy/ Guidelines and any other law.





13. In the event of any shortfall in project funds, or non-collection of the contributions from the constituent units in successful completion of the project, the same will have to be mobilized and brought in by SPV.

14. The first installment of Grant-in-aid (i.e. 20% of the Grant-in-aid) will be released after compliance of other terms & conditions as mentioned in this approval letter and fulfilling of the below mentioned criteria's:

- a) Registration of Land (lease deed) in the name of SPV.
- b) The Mahratta Chamber of Commerce, Industries and Agriculture (MCCIA) should provide an undertaking stating that in the event of any shortfall in project funds, or non-collection of contributions from the constituent units, the same will have to be mobilized and brought in by Mahratta Chamber of Commerce, Industries and Agriculture (MCCIA) and further ensuring that the SPV members should not withdraw from the project at the later stage till the completion of the project and gets operational.
- c) Submission and execution of the requisite administrative legal documents viz; Bond, Memorandum of Agreement, Tripartite ESCROW Agreement (TPA), Bank Guarantee etc.
- d) After deposition of the equivalent proportionate contribution into the ESROW account.

15. The second and subsequent installments of Grant-in-aid will be released as mentioned below:

- i. Second Installment of Grant-in-aid (i.e. 30% of the Grant-in-aid) will be released on complying the following conditions:
  - a) The structure of the SPV should comply with the requirements of "Guidelines for constitution of Special Purpose Vehicle (SPV) for implementation of Electronics Manufacturing Clusters (EMCs) dated 30<sup>th</sup> January, 2014 issued by MeitY".
  - b) There should be at least three representatives of the concerned Government on the Board of Directors in the SPV.
  - c) After utilization of 80% of first installment and proportionate contribution from constituent units/ State Government etc.
  - d) On recommendations of the Project Review Committee (PRC)
- ii. Third Installment of Grant-in-aid (i.e. 30% of Grant-in-aid) will be released on complying the following condition:
  - a) Submission of all pending approvals viz; layout approvals, all environmental related approvals, fire-fighting plan, clearance from Chief controller of Explosives etc. from concerned authorities.
  - b) After utilization of 80% of second installment and proportionate contribution from constituent units/ State Government etc.
  - c) On recommendations of the Project Review Committee (PRC)



iii. Fourth installment of Grant-in-aid (i.e. 20% of Grant-in-aid) will be released on complying the following conditions:

- a) After utilization of 100 % of earlier installments and proportionate contribution from constituent units/ State Government etc.
- b) On successful completion of the project as decided
- c) On recommendations of the Project Review Committee (PRC)

16. The Government of India's disbursement will be effected to the escrow account only when proportionate contribution from SPV is deposited in the escrow account. All the payment to SPV will be released subject to and in accordance to clause 6.13 of the EMC Guidelines. The deposits in the escrow account shall be utilized only for authorized expenditure for the approved project. The Bank Guarantee mentioned in clause 6.13 of the EMC Guidelines shall be in a form acceptable to MeitY.

17. SPV shall provide status on quarterly basis to Project Monitoring Committee (PMC)/ MeitY on physical/ financial progress and the units being set up/ proposed to be set up in the EMC and ensure that at least 75% of the units should be engaged in Electronics System Design and Manufacturing (ESDM) as per M-SIPS Policy.

18. The SPV shall be responsible for timely execution of the project and proper utilization of the funds.

19. The Grant-in-aid sanctioned by the Government of India would be utilized only for the project components mentioned in this approval letter.

20. Any escalation/enhancement in the approved project cost or cost of the individual project component(s) mentioned herein shall be solely borne by the SPV. The SPV shall arrange additional funds, if any required, to meet time and cost overruns. The Central grant for the purposes shall be limited to amount approved for Grant-in-aid as per this approval letter.

21. In the event of reduction of cost in a project component, the Central grant shall automatically get reduced on pro-rata basis for the said project component.

22. It shall be the responsibility of SPV to obtain necessary approvals and clearances as applicable before implementation.

23. The SPV shall submit the "Utilization Certificate" on the basis of audit done by Chartered Accountant and after the acceptance of the same by its Board of Directors.

24. The SPV shall maintain subsidiary accounts of the GOI grant and furnish to the Accounts Officer a set of audited statement of accounts. These audited statements of accounts should be furnished after utilization of Grant-in-aid or whenever called for.





25. The SPV shall undertake all procurement of goods, equipment and services or any other item through a transparent and competitive procurement process. Appropriate performance guarantees should be built in the agreement(s) to ensure timely and good quality delivery of goods and services procured.
26. In case, Ministry of Electronics & Information Technology (MeitY), Government of India is of the opinion that the implementation of the project or operation of the SPV is not satisfactory or in case of disputes amongst the Board members of the SPV, the Government of India would have the powers to effect a change in the management of the SPV or issue such directions as may be necessary. The Articles of Association of the SPV shall be suitably formulated and if required modified to enable the Government of India to enforce, if required the above conditions stipulated while sanctioning the Grant-in-aid.
27. Any other special terms and conditions or procedures for transaction of business, as Government may desire to be followed by the SPV, shall be incorporated in the Articles of Association of the SPV before release of Grant-in-aid.
28. The SPV shall appoint a Managing Director or Chief Executive Officer with approval of its Board of Directors. However, the appointment shall need ratification by the Ministry of Electronics and Information Technology thereafter. SPV or the Managing Director of the SPV, as the case be, would be the Drawing and Disbursing Officer for the amounts released under this approval letter.
29. SPV shall submit performance-cum-achievement report before applying for the next installment as grant (within 6 months from end of every Financial Year).
30. The Accounts of SPV shall be open to inspection by the Ministry of Electronics and Information Technology and audit, both by the Comptroller and Auditor General of India under the provision of CAG (DPC) Act 1971 and internal audit by the Principal Accounts Office of the Ministry of Communication and Information Technology or Ministry of Electronics and Information Technology, whenever M/s SPV (*as the case be*) is called upon to do so.
31. The SPV shall complete process for transfer of the roads and Right of Way as per proposal to Government of India for the Project.
32. The assets acquired wholly or substantially out of Government of India's Grant-in-aid shall not, without the prior sanction of the Government of India, be disposed of, encumbered or utilized for the purpose other than for which the Grant-in-aid has been released.
33. SPV shall provide a certificate of actual utilization of the grants received for the purpose for which it was sanctioned in latest format prescribed in GFR or notified by Ministry of Finance on time to time ,as and when required by the Government of India. The Utilization Certificate should be submitted within six months of the closure of the financial year by the SPV. Receipt of such certificate shall be scrutinized by MeitY. Where such certificate is not





received from the SPV within the prescribed time, the Ministry or Department will be at liberty to blacklist such Chief Promoter and/ or the SPV from any future grant, subsidy or other type of financial support from the Government.

34. The SPV shall maintain a register of permanent and semi-permanent assets acquired wholly or mainly out of the funds of Grant-in-aid on the basis of Form GFR -19.

35. The SPV shall furnish a return of such assets acquired during a financial year in the Form-GFR-19 or as prescribed by Ministry of Finance on time to time basis.

36. The SPV shall fix user charges for various facilities and services provided by under the Project in order to ensure that it fully recovers the O&M cost and make the Project sustainable.

37. In case of winding up, dissolution, etc. of the SPV, at any point in time, all assets and any unutilized grant shall automatically vest with the Government of India.

38. SPV shall report on the physical progress as well as the expenditure incurred in the Project to the Nodal Officer of the EMC Scheme every quarter.

39. MeitY shall display on its website the details of the Project approved and the progress of its implementation.

40. Out of the Grant-in-aid, the administrative expenses (incurred during the execution of the project) shall be limited to that approved as per this approval letter. Administrative expenses beyond this amount shall be met by SPV from its own resources. The administrative expenses will be incurred by the SPV during the execution of the project.

41. In the event, if SPV fails to comply with the conditions laid out in the EMC Scheme and/ or Guidelines and/ or this approval letter at any time, the SPV shall be liable to refund to the President of India the entire amount of the Grant-in-aid with interest @ Prime Lending Rate (PLR) per annum of RBI thereon and will be liable to such other penalties as provided under the approval and any other law. MeitY shall also be entitled to take legal action for recovery of the dues as may be considered appropriate.

42. The SPV shall submit all relevant documents within the timelines as specified in the EMC Scheme and Guidelines, demonstrating the fulfillment of all terms and conditions precedent at each stage.

43. The facility should be a common facility, open and accessible to all units and should not be restricted to only the members of the SPV.

44. All procurement by SPV under the project should be done in an open and transparent manner.

45. The contents of this approval letter shall prevail in case of any conflict with any previous communication from MeitY/ GOI in this regard.

46. The terms and conditions of this approval letter are inclusive and /or in addition to the standard terms and conditions mentioned in Annexure – 8 of the EMC Guidelines. In case of any conflict between the terms and conditions mentioned in this approval letter and the terms and conditions mentioned in the EMC Scheme or EMC Guidelines or any other terms and conditions imposed on the SPV regarding the Project, Government of India shall have the sole authority and right to decide which terms and conditions shall prevail and the decision of the Government of India shall be final and binding on the SPV.

47. In case of any dispute, Secretary, Ministry of Electronics & Information Technology, Government of India, shall be the sole "Arbitrator" and his decision shall be final and binding for all concerned.

Yours faithfully,



(Sanjay Koul)

Principal Technical Officer

Tel: 011-24301781

Copy to:

1. PS to Hon'ble Minister(E&IT)for kind information of Hon'ble Minister(E&IT),Govt. of India
2. PS to Hon'ble MOS(E&IT) for kind information of Hon'ble MOS(E&IT), Govt. of India
3. Secretary, MeitY
4. AS&FA, MeitY
5. Principal Secretary, Department of Industries , Government of Maharashtra



(Sanjay Koul)

Principal Technical Officer

Tel: 011-24301781



**Definitions:**

Capitalized terms used in the approval letter no. 36(24)/2016-IPHW (Vol.IV) dated 13<sup>th</sup> December, 2017 issued to M/s MCCIA Electronic Cluster Foundation (MECF) shall have the meaning ascribed to such terms in the EMC Scheme and EMC Guidelines and where such terms are not defined therein, the terms shall have the meaning, unless the context otherwise requires, as provided below:

1. **SPV:** M/s MCCIA Electronic Cluster Foundation (MECF)
2. **Grant-in-aid:** Financial assistance provided by MeitY towards implementation of the project (refer para 4.1 of the EMC Scheme dated 22<sup>nd</sup> October, 2012).
3. **Project:** Project for setting up of CFC at Plot number J/P-8, J 462 and J 462/P, Pimpri Industrial Area, Pune, Maharashtra submitted by M/s MCCIA Electronic Cluster Foundation
4. **MeitY:** Ministry of Electronics & Information Technology, Government of India.
5. **PLR:** Prime Lending Rate as issued by RBI prevailing at the time occurrence of the event.
6. **GOI:** Ministry of Electronics and Information Technology acting for and on behalf of the President of India
7. **Form GFR-19:** General Financial Rules (GFR) issued by Ministry of Finance, Government of India from time to time.
8. **EMC Scheme:** Electronic Manufacturing Scheme Notification No. 252 dated 22<sup>nd</sup> October, 2012 in Part-I, Section 1 of the Gazette of India (Extraordinary) [F.No. 8(50)/2011-IPHW]
9. **EMC Guidelines:** Guidelines for Electronics Manufacturing Clusters (EMC) Scheme to provide world class infrastructure for attracting investments in the Electronics Systems Design and Manufacturing (ESDM) Sector dated 15<sup>th</sup> April, 2013 [F.No. 8(50)/2011-IPHW].
10. **SPV Guidelines:** Notification of Guidelines for constitution of Special Purpose Vehicle (SPV) for implementation of Electronics Manufacturing Clusters (EMCs) dated 30<sup>th</sup> January, 2014 [F.No. 8(131)/2012-IPHW].
11. **Accounts Officer:** Accounts Officer appointed by Ministry of Electronics & Information Technology
12. **Utilization Certificate:** Utilization Certificate stipulated as per format prescribed in GFR/ notified by Ministry of Finance on time to time.



Land document w.r.t Common Facility Centre at Plot number J/P-8, J 462 and J 462/P,  
Pimpri Industrial Area, Pune, Maharashtra

MAHARASHTRA INDUSTRIAL DEVELOPMENT CORPORATION  
(A Government of Maharashtra Undertaking)

No. ROP/641/2017.

Regional Office,  
MIDC, "Jog Center" IInd floor, Pune-Mumbai Road,  
Wakadewadi,  
Pune-411 003.

Date: 20 FEB 2017

To,  
M/s. Mahratta Chamber of Commerce, Industries & Agriculture  
A Wing 5<sup>th</sup> Floor, MCCIA Trade Tower,  
S.L. Kirloskar International Convention Centre Complex  
Senapati Bapat Road, Pune - 411 016

**Sub: - Lease of 2257.42 Mtr. Land at Plot No. J-462 &  
J/P -8 to MCCIA Electronics Cluster.**

Ref: - 1) Your letter 83 /MECF/C/829 dt. 20.09.2016  
2) This office letter No. 527 dt. 02.12.2016

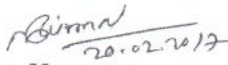
Sir,

In connection with the subject matter it is, to inform you that ,the following  
Information.

1. The subject Industrial plot No. J-462 has been allotted to MCCIA on a long lease of 95 years on 01.04.1988.
2. There is no encumbrance ( lien/mortgage/ any charge) on this plot as per records of MIDC.
3. The said plot has been allotted to MCCIA for the purpose of providing services which support and promote industrial development.
4. MIDC is supplying water to the said MIDC Plot.

Thanking you.

Yours faithfully,

  
Area Manager  
MIDC , Pune -3





MAHRATTA CHAMBER OF COMMERCE, INDUSTRIES AND AGRICULTURE

March 20, 2017

To Whomsoever It May Concern

With respect to setting up of electronic manufacturing cluster by MCCIA Electronic Cluster Foundation (MECF) in Pune and the Letter of Intent from MCCIA dated October 10, 2016, we declare that on Final Approval from Ministry of Electronics and Information Technology, GoI for the Project, MCCIA shall allot a maximum of 27000 Sq Ft on Chamber's land situated at Plot # J/P-8, J 462 and J 462/P in Pimpri Industrial area of Pune, on a long lease for 30 years. MCCIA shall enter into the sublease agreement with MECF immediately on receipt of Final Approval by MECF and before the disbursement of grant from GoI

A handwritten signature in black ink, appearing to read "Anant", is written over a horizontal line.

Dr. Anant Sardeshmukh  
Director General

**List of equipment for Common Facility Center:****(A) Design Center & Rapid Prototyping**

<b>Equipment with Specification</b>	<b>Quantity</b>	<b>Amount (In Rs.)</b>
PADS ES Suite	1	11,44,897
Expedition Enterprise	1	51,99,073
Orcad Capture	5	1,01,50,000
Altium	5	39,10,691
Open Source	10	-
Allegro Suite	1	81,68,720
Ansys SI Option	1	27,03,844
Hyperlynx	1	15,88,690
Hyperlynx	1	85,75,857
Phoenix	1	92,09,258
Keil MDK Pro	2	13,15,275
Keil Ulink Pro	2	2,26,313
Intel SPE 999L SGE 01X1Z	2	2,45,866
Microchip	2	8,97,625
Xilinx	1	3,11,511
Vivaldo	1	5,02,144
Vivaldo	1	73,653
Vivaldo	1	2,59,521
Vivaldo	1	4,15,492
Vivaldo	1	60,223
Diamond E12 M	1	86,217
Segger 3.50.04	1	8,63,968
Segger 8.12.00	1	85,051
Atolic TS ARM PRO WIN net	1	8,77,424



<b>Equipment with Specification</b>	<b>Quantity</b>	<b>Amount (In Rs.)</b>
Segger 1.23.04.01	1	4,39,037
Segger 1.38.04.17	1	4,39,037
Segger 12.02.03.14	1	8,63,968
Lauterbach LA 3500	1	2,02,400
Lauterbach LA7843	1	2,34,026
Lauterbach LA 3737	1	2,34,027
Lauterbach LA 3736	1	3,03,603
Lauterbach LA 3719	1	3,03,603
QuartusII	1	3,46,171
QuartusII	1	81,886
Autodesk Auto-CAD 2016	5	13,21,724
Mechanical CAD 3D software with one year maintenance	5	2,81,037
Object 260 Connex 3	1	1,77,98,559
Kudo Titan 1	1	7,31,250
Flowtherm Parallel Asp	1	67,94,120
<b>Total-A (Design Center &amp; Rapid Prototyping)</b>		<b>8,72,45,761</b>

**(B) Test & Measurement**

<b>Equipment with Specification</b>	<b>Quantity</b>	<b>Amount (In Rs.)</b>
Digital Storage Oscilloscope : 50MHz,2 channel,1GSa/s	5	1,64,031
Digital Storage Oscilloscope : 100MHz,2 channel,1GSa/s	3	2,12,897
Power Supply : 30V, 3A ,1- output	5	1,61,222
Power Supply : 25V,1A, 2 output	5	2,49,808
Arbitrary Function Generator: 30MHz,2-channel, Arbitrary Function	5	12,58,239
Digital Multi-meter : True RMS 50000 count handheld DMM with freq counter and square wave output	5	1,70,647
Digital Multi-meter : True RMS 10000 count handheld DMM with data-logging	5	90,842
Digital Multi-meter : True RMS 6000 count handheld DMM with non-contact voltage detector	5	68,524
Soldering Station	3	63,479

Equipment with Specification	Quantity	Amount (In Rs.)
Mixed Signal Oscilloscope : 500 MHz 4 analog plus 16 digital channels Easily view and analyze your signals with on the large 8.5-inch capacitive touch screen Isolate signals in seconds with exclusive Zone touch triggering See more signal detail with the 1,000,000 wfms/s update rate Capture more data with up to 4 Mpts memory Expand your measurement capabilities with full upgradability: Add bandwidth, 20 MHz arbitrary waveform generator, 3-digit voltmeter, serial trigger and analysis & mask testing at any time	3	24,09,057
CAN/LIN automotive triggering and decode :(4 and 4+16 channel models only)	1	1,17,862
I 2C/SPI Serial decoding option: (4/4+16 channel only)	1	117,862
LCR Meter: 20Hz to 2MHz, LCR components, Material Measurement, Semiconductors	2	25,88,696
SMD Test Fixture	1	1,53,356
Large Kelvin Clip Lead	1	67,322
Test fixture for axial and radial leaded components	2	79,535
Logic Analyzer 102 channel 32M memory, 48 channel pattern generator, 4GHZ timing zoom, 500MHz transitional timing.	1	22,18,777
Increase maximum state speed to 500 Mb/s	1	158,374
TTL Data Pod and Lead Set	1	34,037
LVDS Data Pod and Lead Set	1	34,037
Field-Fox and HAS : 5KHz to 50GHz Handheld Spectrum Analyzer	1	30,03,899
Rework Station, SMD Rework Station	1	2,42,066
DC Power Supply : 80W Triple Output Power Supply, 6V, 5A & $\pm 25V$ , 1A	1	1,05,538
DC Power Supply : 100W Dual Output Power Supply Two 35V, 1.4A or 60V, 0.8A	1	1,00,720
DC Power Supply : 200W Power Supply, 25V, 7A or 50V, 4A	1	1,11,517
DC Power Supply : 6600-Watt System Power Supply, 60V, 110A	1	8,10,349
DC Power Supply : 80V, 510A,15000W,240 VAC,Autoranging power supply	1	9,29,968
DC Power Supply : 6.5 Digit Low Noise Power Source	1	7,22,172



<b>Equipment with Specification</b>	<b>Quantity</b>	<b>Amount (In Rs.)</b>
DC Power Module:60V, 20A, 300W, double-wide	1	2,83,773
DC Power Module: 150V, 2A, 300W	1	1,14,106
Precision DC Power Module: 60V, 17A, 500W	1	3,25,504
DC Power Analyzer Mainframe	1	5,70,383
N6705B-056 Software License to Control N6705A/B with 14585A Control and Analysis Software	1	1,46,692
Handheld Digital Multi-meters : True RMS 1000A AC/DC Clamp Meter Pro	1	29,135
Handheld Digital Multi-meters : True RMS 50000 count handheld DMM with frequency counter and square-wave output	1	34,129
Handheld Digital Multi-meters : True RMS 10000 count handheld DMM with data-logging	1	21,934
IR-USB cable	1	2,364
Handheld Digital Multi-meters : True RMS 6000 count handheld DMM with non-contact voltage detector	1	13,706
Handheld LCR Meter : LCR Meter, handheld, 20000 count, dual display 100Hz/120Hz/1KHz/10KHz/100KHZ	1	31,105
Handheld Oscilloscope : Handheld Digital Oscilloscope, 200MHz,2GSa/s,2Mpts,	1	2,90,087
Digital Storage Oscilloscope : 200MHz, 4 Channels, 1Ga/S	1	1,47,377
Thermal Imager : 1200 C True IR Thermal Imager	1	464,740
DC Electronic Load : 1800 Watt DC Electronic Load Mainframe	1	2,00,368
Electronic Load Module : 600 Watt Electronic Load Module Current: 0-120 A, Voltage: 0-60V, Power: 600W	1	2,45,418
Power Analyzer AC,DC,AC+DC : Power Analyzer, 4 channels, 3 phase	1	21,85,377
AC Source : Basic AC Power Source, 4000 VA, 270 V, 20 A	1	10,18,021
AC Power Source / Power Analyzer : AC Power Source / Power Analyzer, 1750 VA, 300 V, 13 A	1	9,77,039
RF Signal generator: 9KHz to 3.0GHz	1	5,72,964
RF Analog Signal Generator : Frequency range, 9 kHz to 6 GHz	1	13,28,861
RF Analog Signal Generator : AM, FM, phase modulation	1	41,447
RF Analog Signal Generator : Narrow pulse modulation	1	77,816
Vector Signal Generator: Frequency range, 9 kHz to 6 GHz	1	24,05,088
RF Vector Signal Generator : AM, FM, phase modulation	1	75,872
RF Vector Signal Generator : Narrow pulse modulation	1	99,074



<b>Equipment with Specification</b>	<b>Quantity</b>	<b>Amount (In Rs.)</b>
RF Vector Signal Generator : High output power	1	2,06,028
RF Vector Signal Generator : Differential I/Q outputs	1	1,40,069
RF Vector Signal Generator : Enhanced dynamic range	1	2,06,028
RF Vector Signal Generator : Upgrade baseband generator from 60 to 160 MHz RF bandwidth	1	7,75,762
Basic vector signal analysis and hardware connectivity, transportable license	1	4,67,465
Hardware connectivity, transportable license	1	-
Vector modulation analysis, transportable license	1	4,99,295
3G modulation analysis bundle, transportable License	1	7,67,791
WLAN 802.11a/b/g/p modulation analysis, transportable license	1	3,24,825
CDMA2000 modulation analysis, transportable license	1	3,41,066
W-CDMA/HSPA+ modulation analysis, transportable license	1	3,41,066
1x-EVDO modulation analysis, transportable license	1	3,41,066
TD-SCDMA/HSPA modulation analysis, transportable license	1	3,41,066
WiMAX 802.16 modulation analysis, transportable license	1	5,31,560
WLAN 802.11n modulation analysis, transportable license	1	5,31,560
TEDS modulation analysis, transportable license	1	2,06,737
RFID modulation analysis, transportable license	1	4,42,967
LTE FDD modulation analysis, transportable license	1	5,90,605
LTE TDD modulation analysis, transportable license	1	5,90,605
Custom OFDM modulation analysis, transportable license	1	4,25,911
LTE-Advanced FDD modulation analysis, transportable license	1	1,98,751
LTE-Advanced TDD modulation analysis, transportable license	1	1,98,751
WLAN 802.11ac modulation analysis, transportable license	1	1,98,751
Custom IQ modulation analysis, transportable license	1	2,17,274
Channel quality measurements, transportable license	1	2,71,592
Wireless LAN Tech fund, 8 students, customer site - H7216B-337	1	37,045
89600 VSA Basic Operation Web class.	1	3,087
Digital radio troubleshooting, 8 students, customer site - H7216B-108z	1	74,088
user's course, 8 students, customer site -	1	37,045



<b>Equipment with Specification</b>	<b>Quantity</b>	<b>Amount (In Rs.)</b>
Recommended Startup assistance	1	49,316
Signal Studio : Basic W-CDMA / HSPA R7, floating license	1	4,29,822
Signal Studio : Basic W-CDMA / HSPA+ R8, floating license	1	1,04,835
Signal Studio : Advanced W-CDMA / HSPA+ R11, floating license	1	3,14,124
Signal Studio : Advanced W-CDMA/HSPA+ real-time R8 UL, transportable perpetual license	1	7,59,970
Signal Studio : Basic cdma2000, floating license	1	2,70,343
Signal Studio : Basic 1xEV-DO, transportable perpetual license	1	2,70,343
Signal Studio : Minor enhancement update for floating options	1	27,160
Signal Studio : Advanced cdma2000, transportable perpetual license	1	2,53,721
Signal Studio : Advanced 1xEV-DO, transportable perpetual license	1	2,53,721
Signal Studio : Advanced cdma2000 real-time UL, transportable perpetual license	1	6,43,674
Signal Studio for GSM/EDGE/Evo	1	-
Transportable perpetual license	1	-
Signal Studio : Basic GSM/EDGE, transportable perpetual license	1	3,47,150
Signal Studio : Basic EDGE Evo, transportable perpetual license	1	84,682
Signal Studio : Minor enhancement update	1	27,160
Signal Studio : Advanced GSM/EDGE/Evo, transportable perpetual license	1	2,53,721
Signal Studio : Advanced GSM/EDGE real-time, transportable perpetual license	1	7,20,480
Basic real-time fading, transportable perpetual license	1	10,59,210
Advanced Bluetooth V 1.1, transportable perpetual license	1	1,53,015
Advanced Bluetooth V 2.1+EDR, transportable perpetual license	1	2,57,035
Advanced Bluetooth Low Energy, transportable perpetual license	1	2,57,035
Signal Studio for Custom Modulation	1	0.00
Transportable perpetual license	1	0.00

<b>Equipment with Specification</b>	<b>Quantity</b>	<b>Amount (In Rs.)</b>
Custom IQ, transportable perpetual license	1	1,41,228
Custom OFDM, transportable perpetual license	1	1,76,535
Custom 5G, transportable perpetual license	1	1,76,535
Signal Studio for Broadcast Radio	1	-
transportable perpetual license	1	-
Advanced FM stereo/RDS, floating license	1	3,86,476
Advanced FM stereo/RDS, transportable perpetual license	1	3,86,476
Advanced DAB/DAB+/DMB, transportable perpetual license	1	3,86,476
ETI support for DAB/DMB, transportable perpetual license	1	1,61,217
Signal Studio for TD-SCDMA/HSPA	1	-
Basic TD-SCDMA/HSPA, transportable perpetual license	1	4,31,451
Minor enhancement update	1	27,160
Advanced TD-SCDMA/HSPA, transportable perpetual license	1	2,53,721
Signal Studio for Mobile WiMAX	1	-
Basic Mobile WiMAX, transportable perpetual license	1	3,30,582
Advanced Mobile WiMAX, transportable perpetual license	1	2,41,772
Advanced Mobile WiMAX 802.16 Updates, transportable perpetual license	1	15,807
Studio for WLAN 802.11a/b/g/j/p/n/ac/ah	1	-
Basic 802.11a/b/g/j/p/n WLAN, transportable perpetual license	1	2,44,813
Basic 802.11ac WLAN, transportable perpetual license	1	2,65,183
Basic 802.11ah WLAN, transportable perpetual license	1	2,04,020
Minor enhancement update	1	27,160
Advanced 802.11a/b/g/j/p/n WLAN, transportable perpetual license	1	2,09,670
Advanced 802.11ah WLAN, transportable perpetual license	1	1,61,271
Signal Studio for Pulse Building	1	-
Basic pulse building - pulse patterns, transportable perpetual license	1	12,03,914
Signal Studio for Digital Video	1	-
Advanced DVB-T/H real-time, transportable perpetual license	1	4,85,716
Advanced DVB-C/J.83 Annex A/C real-time, transportable perpetual license	1	4,85,716



<b>Equipment with Specification</b>	<b>Quantity</b>	<b>Amount (In Rs.)</b>
Advanced DVB-S/S2 real-time, transportable perpetual license	1	4,85,716
Advanced DVB-T2 real-time, transportable perpetual license	1	4,85,716
Advanced ISDB-T real-time, transportable perpetual license	1	4,85,716
Advanced ISDB-Tmm, ISDB-T enhancement, transportable perpetual license	1	1,61,217
Advanced ATSC-M/H, transportable perpetual license	1	3,47,583
Advanced BER tools, transportable perpetual license	1	80,555
Advanced DVB-T/H/C/J.83 Annex A/C, transportable perpetual license	1	3,47,583
Advanced ISDB-T, transportable perpetual license	1	3,47,583
Advanced DTMB, transportable perpetual license	1	3,47,583
Advanced ATSC, transportable perpetual license	1	3,47,583
Advanced DVB-S, transportable perpetual license	1	3,47,583
Advanced DVB-S2, transportable perpetual license	1	3,47,583
Advanced CMMB, transportable perpetual license	1	3,47,583
Advanced DVB-T2, transportable perpetual license	1	3,47,583
Signal Studio for LTE/LTE-Advanced FDD	1	-
Basic LTE FDD, transportable perpetual license	1	3,96,742
Basic LTE-Advanced FDD, transportable perpetual license	1	1,93,537
Envelope tracking, transportable perpetual license	1	1,44,759
Multi-UE Simulation, fixed perpetual license	1	1,08,637
Multi-UE Simulation, transportable perpetual license	1	1,41,228
Minor enhancement update	1	27,160
Advanced LTE FDD, transportable perpetual license	1	2,89,951
Advanced LTE-Advanced FDD, transportable perpetual license	1	2,89,951
Advanced LTE/LTE-Advanced FDD real-time R9/R10 UL, transportable perpetual license	1	7,08,150
Basic LTE TDD, transportable perpetual license	1	3,96,742
Basic LTE-Advanced TDD, transportable perpetual license	1	1,93,537
Envelope tracking, transportable perpetual license	1	1,44,759
Multi-UE Simulation, fixed perpetual license	1	1,08,637
Advanced LTE TDD, transportable perpetual license	1	2,89,951
Advanced LTE-Advanced TDD, transportable perpetual license	1	2,89,951



Equipment with Specification	Quantity	Amount (In Rs.)
Advanced LTE/LTE-Advanced TDD real-time R9/R10 UL, transportable perpetual license	1	70,958
Spectrum Analyzer : Frequency range, 3 Hz to 43 GHz	1	57,60,653
Spectrum Analyzer : Analysis bandwidth, 85 MHz	1	15,87,902
Spectrum Analyzer : Electronic attenuator, 3.6 GHz	1	2,17,973
Spectrum Analyzer : Enhanced display package license	1	1,16,428
Spectrum Analyzer : Basic EMC functionality license	1	1,09,121
Spectrum Analyzer : Microwave pre-selector bypass	1	3,77,788
Spectrum Analyzer : Preamplifier, 44 GHz	1	15,625
EMI Measurement Application	1	-
Spectrum Analyzer : EMI measurement application, fixed perpetual license	1	2,63,011
Handheld Spectrum Analyzer, 3.0 GHz	1	6,30,970
Mixed Signal Oscilloscope : Infiniium MSO - 4 GHz, 10/20 GSa/s, 4+16 Ch	1	16,16,833
Mixed Signal Oscilloscope : Probe Amplifier – Infinii Max, 5 GHz	1	4,67,358
Mixed Signal Oscilloscope : Differential probe - 6 GHz	1	4,47,795
Digital multi-meter, 6 ½ digit, Truevolt DMM	1	1,02,110
Digital Multi-meter, 8½ Digit	1	7,16,122
Nanovolt/micro-ohm meter, 7.5 digit	1	3,25,517
LXI Data Acquisition Switch Unit with LAN and USB	1	1,30,529
Armature Multiplexer Module for 34970A, 20-Channel	1	39,173
LCR Meter : 2 MHz Precision LCR Meter	1	12,94,348
LCR Meter : SMD Test Fixture	1	1,53,356
LCR Meter : Large Kelvin Clip Lead	1	67,322
LCR Meter : Test fixture for axial and radial leaded components	1	39,767
Impedance Analyzer, 20 Hz to 10	1	15,89,365
ENA Series Network analyzer 2-port Test Set, 300 kHz to 20 GHz with Bias Tees	1	43,92,777
Economy mechanical calibration kit, DC to 26.5 GHz, 3.5 mm	1	4,72,015
Rugged phase-stable cable, 3.5 mm(m) to 3.5 mm(f), 26.5 GHz, 3.28 ft or 1 m	1	58,622
Photo-voltaic Array Simulator : 1500VDC output,1000VDC isolation, Continuous V/I combination (1500V/10A to 500V/30A), 15kW(1500V,30A) in 3-RU chassis.	1	11,85,251



Equipment with Specification	Quantity	Amount (In Rs.)
Photo-valtaic Array Simulator	1	11,85,251
BGA/SMT Rework System 2300W,230V	1	26,93,040
Precision micro tweezers ( 80 mm,6 g )	1	1,979
Precision tweezers with serrated grips (120 mm, 20 g )	1	2,253
Precision tweezers( 125 mm, 16 g )	1	1,132
Micro precision tweezers with very small and very fine tips( 90 mm, 9 g )	1	2,243
Precision tweezers with finer tips, curved 30 degree ( 115 mm, 12 g )	1	1,587
Precision tweezers with straight and sturdy tips (120 mm, 30 g)	1	3,280
Side cutter, semi flush, small head for very good access (110 mm ,48 g )	1	4,443
Side cutter-tapered head ( 110 mm, 48 g)	1	4,443
Tip cutter, medium size flush cut for fine work at hybrid or micro component ( 135 mm)	1	6,771
Side cutter flush cut allows very good access (110 mm ,48 g)	1	4,444
Tip cutter flush cut, angled head for horizontal cutting (140 mm)	1	6,559
<b>Total-B (Test &amp; Measurement)</b>		<b>8,51,11,458</b>

**(C) SMT Line**

Equipment with Specification	Quantity	Amount (In Rs.)
Magazine Loader - FL-300E	1	4,13,440
Screen Printer - US2000X	1	45,47,840
Solder Paste Inspector TROI-7700E	1	49,61,280
Buffer Conveyor - FCC-600	1	1,15,763
Chip Mounter - SM168	1	1,24,03,200
Multi Mounter - SM168	1	
8mm TAPE FEEDER	85	
8mm TAPE FEEDER	5	
12mm TAPE FEEDER	5	
16mm TAPE FEEDER	5	
24mm TAPE FEEDER	3	
32mm TAPE FEEDER	1	
44mm TAPE FEEDER	1	
Auto Tray Feeder	1	

Inspection Conveyor - FWT-155	1	1,40,570
Reflow Oven - A70-j82	1	37,20,960
Cooling Conveyor - FCC-600	1	1,15,763
Magazine Unloader - FU-300E	1	4,96,128
Feeder calibration jig	1	4,59,571
De-humidifier	2	10,34,035
Stencil Storage Rack	1	1,14,893
Component counter	1	2,06,285
Tension Guage	1	1,82,784
Push Pull Guage	1	2,17,600
Level Guage	1	43,520
Electronics tester	1	13,056
Tool box (Including tools)	1	1,30,560
Nozzle Cleaning m/c with Microscope	1	12,18,560
Reflow Checker	1	3,91,680
Solder Paste Softener (mixer)	1	478,720
Splicing tool with trolley	1	1,04,448
Material storage Rack/ Trolley	4	6,26,688
Solder Iron	2	52,224
Hot air gun	1	3,65,568
Magnifying Lens	2	2,08,896
Electric Screw driver	4	2,61,120
PCBA magazine rack	20	1,04,448
Refrigerator	1	45,800
Air Compressor	1	6,87,000
Duct with motor	1	57,250
LCR Meter	1	1,14,500
<b>Total-C (SMT Line)</b>		<b>3,40,34,150</b>

**(D) EMI/EMC Lab**

<b>Equipment with Specification</b>	<b>Quantity</b>	<b>Amount (In Rs.)</b>
ESD Simulator: Stand alone generator for immunity testing. Complying with IEC 61000-4-2 and ISO 10605 with Bleeder resistor cable and target attenuator cable for ESD pulse calibration	1	17,67,430
Multifunctional Simulator : Includes stand alone EFT / Burst simulator with single phase and three phase CDN upto 8KvA (ii)Stand alone Surge Generator up to 4.4KvA surge testing (iii)Dip and Interrupts simulator in	1	79,00,969



Equipment with Specification	Quantity	Amount (In Rs.)
compliance with IEC 61000-4-11 (iv)Dual supply source for variation testing up to 265V/16A equipment (v)Burst EFT capacitive coupling (VI)Magnetic field sources and coils for IEC 61000-4-8 and IEC 61000-4-9 (VII)Calibration and measurement accessories for the above (VIII)Adaptors and Plugs for the above		
Automotive Conducted Immunity : Transient immunity system with main frame/Built in coupler/power supply and computer interface/With capability of generating ISO and SAE pulses for Automotive testing with capacitive and high voltage probes/capacitive coupling	1	1,26,59,449
Conducted RF systems : Continuous wave simulator with built in amplifier and attenuators/IEEE cable and matching resistance CDNs with calibration adaptors	1	73,40,708
Harmonics and Flicker Analyzer: Three phase Harmonics and Flicker analyzer with 3 phase power source 3-phase Flicker impedance and Minirack cubicle	1	1,12,16,069
Radiated and conducted Emissions conducted emissions for 9KHz to 300 MHz Radiated Emissions from 30MHz to 8GHz Radiated Emission extensions from 6GHz to 18GHz Radiated immunity 80MHz to 6 GHz,54 V/m CW at 3m and 200 V/m at 1m distance from 200 MHz -6GHz Radiated immunity extension from 4GHz to 18GHz ,200V/m CW at 1m	1	12,56,44,254
Anechoic Chamber and rooms i)Control room and Amplifier rooms with with PAN type shielding modules / With Rubber membrane for humidity protection/ high performance(100 dB from 14KHz to 40 GHz) power filters/Honeycomb structure with isolated flexible frame and fire detectors (ii)Semi Anechoic chamber SAC-3 Plus L dome design with accessories for CISPAR 25 testing	1	4,12,45,301
<b>Total-D (EMI/EMC Lab)</b>		<b>20,77,74,180</b>

**(E) Environmental Test & Certification**

<b>Equipment with Specification</b>	<b>Quantity</b>	<b>Amount (In Rs.)</b>
Portable Measurement Device for speed, acceleration , time measurement with USB and RS232 output with temperature compensation with multifunction display including ,thermocouple interface module: RLVBADC03,RLVBACS058,RLVBTC8-V2,RLVBFIM03, RLRTM24VBTU,SG-10,S50	1	28,02,721
Servo hydraulic system: Intelligent and reliable test system with integrated software for test sequence control and PID setting control with load frame designed for the installation of axial actuators (LH100-100) and anti vibration mounts , accumulators, servo valves and safety guards and load cell of 100kN capacity/Hydraulic power units and hose sets and test pert software and LCD flat screen display	1	1,88,73,266
Pneumatic system with compressor	1	-
Data Acquisition System & software :DT 85 series 3 datalogger16 channels analog and 12 digital channels with channel expansion module	1	5,67,500
Load Cells 100n/500n 10 no's	1	1,34,194
Accelerometers uni-axial and tri axial 2 each	1	4,62,000
Strain Guage systems,500234 Pieseler & Panasonic CF-53 Modules	1	4,04,381
Displacement Transducer (Wire actuated encoder) 3 types	1	2,61,368
Frequency Sweep Generator: 10MHz /2 channel arbitrary waveform generator	1	1,08,252
T slotted Bed Plate with clamping type milled T slots as per DIN 650 in gray iron casting and minimum hardness 160 BHN	1	12,82,550
Oscilloscope: Four channel/200MHz with 8.4 inch high resolution LCD screen including action on trigger and history functions	1	5,52,463
Sound level measurement equipment with cables and associated hardware and amplifiers with total MKII hardware/PAK base system/PAK data import / PAK data export /PAK throughput data acquisition and	1	26,64,168
FFT analyzer : WR8K- Spectrum analyzer with advanced FFT option and 2.5 Ghz active voltage probe	1	7,08,383



Equipment with Specification	Quantity	Amount (In Rs.)
Fuel Consumption Meter: for fuel consumption measurement of engines /modular stand alone system with senso for fuel flow and pressure and heat exchanger/quick coupling/conditioning and amplifying units	1	5,06,960
Steering Torque Measurement : with steering torque sensor of 250 NM capacity /Adjustible mounting arrangement/with touch screen display/Complies to IS and Euro norm standards	1	17,17,500
Hot chamber : heating and drying oven upto 300 <sup>0</sup> c with 980 ltrs capacity with convection type heating	1	2,07,963
Salt spray test chamber with salt mist apparatus as per IEC 60068-2	1	1,08,314
Thermal shock	1	64,46,467
ozone chamber: consisting (50-250pphm) of Ozone generator/PT-100 sensor/programmable digital temperature controller/static and /Ozone concentration controller dynamic test fixtures	1	7,59,460
Dust chamber :minimum size 1000*1000*2000 size/Dust agitator mechanism as per JSS 55555/micro processor based PID controller	1	12,76,350
Humidity chamber :990 Liters /Temp range -40 <sup>0</sup> -180 <sup>0</sup> with temp change rate of 3 <sup>0</sup> /Humidity range 10% to 98%	1	39,68,345
UV chamber : For UV degradation test covering UVA and UVB wave lengths with irradiance control and optical and temperature sensor	1	17,08,267
Temperature Cyclic: with psychometric measurement system /standard entry ports with Simpati software	1	34,24,163
Weatherometer: Xenon arc weatherometer with irradiance controller/Humidity controller/Air Temperature controller/Black panel temperature controller/with specimen holder and filters /data acquisition system	1	1,55,43,927
IP testing : Ingress protection as per IEC 60529 with Oscillating tube /rotating table/nozzles Water proof test and drip box	1	22,28,669
Flamability test setup (Needle flame)/UL Chamber/bsll pressure test /comparative tracking index/Glow wire test setup	1	11,63,375
UL chamber	1	3,41,406

Equipment with Specification	Quantity	Amount (In Rs.)
Impact tester	1	2,26,940
AC/DC meters 7½ digit	1	11,89,320
Calibration Meter 8½ digit	1	-
Compliance Tester: Multi function 5 KV //50mA AC and 6Kv /20mA DC hipot with built in insulation resistance and ground bond tester including OPT 794 scanner	1	8,37,397
Creepage distance measurement kit : consisting of Auto E /Auto1175 / Auto13/Auto18 /Auto19/Auto20/Auto-B/Auto -C/Auto-D /Auto-PD27 probes	1	2,09,609
Tong tester/voltmeter : Measures AC/DC voltage and current/resistance and frequency/True RMS display with LCD digital display with 3999 counts	1	62,328
Vickers Hardness Tester : from 10-1000 Kgf test load /resolution 0.001/100x magnification includes diamond indenter/hardness test block/spacers/power cable	1	24,24,432
Shore hardness	1	9,009
Microscopic examination: With built-in adjustable LED for illumination/ resolution 1600x1200/magnification 100x/should be able to capture pictures and videos	1	21,945
Leakage Current test set up for medical and general use electrical devices with built in networks/rated current up to 20A with test leads/power cords	1	5,46,451
Universal testing machine/Tensometer: with force capacity 5KN./cross head travel 900mm/load resolution0.0001/with extensometer Of 0.1 micron resolution	1	44,96,331
Izod-Impact Tester: Advanced Universal Pendulum Impact Tester utilizes advanced microprocessor technology to determine the energy required to break or rupture specimens such as plastics, composites, ceramics and non ferrous metals to International testing methods for Izod, Charpy and Tension Impact Testing. includes IZOD and Charpy hammers/Inserts/Drop height assembly and Graph master software	1	42,02,584
Taber abrasion machine: Single head abrasion tester including vacuum system/Auxiliary weights/Specimen mounting cards/holders calibrated wheel sets	1	8,80,193
Flex-Tester as per IEC 60065	1	2,05,103
Magnetic Crack Detection: For inspection of Ferrous	1	2,14,115



Equipment with Specification	Quantity	Amount (In Rs.)
components./With head shot current of 1500 amps and job clamping facility up to 600mm		
Surface Roughness: Suitable for flat and curved surface measurement. includes drive unit/Detector unit/carry case/Touch pen and printer	1	5,85,585
Height Gauge: With 350mmcolumn travel/0.1micron resolution includes one sided cut stylus and gauge blocks	1	19,50,275
Clinometer	1	11,781
Slip/snap/plug gauges	1	69,300
Micro-Balance: Platform size 500*400 mM/IP 67 compliant with stainless steel load plate/With Tactical key board with 50kg minimum capacity	1	59,252
Gloss meter: With 60° angle and 0-100GU range	1	2,51,444
Light Transmittance : Set-up-for near field photometry with AC/DC power supply /standard lamps for calibration/optic reflex mirrors	1	86,65,121
Colourometer for measurement of chromaticity coordinates at correlated colour temperatures	1	1,73,943
Haze Meter: With 60° / 1200angle and 0-100GU and 0-100HU range	1	2,51,444
Viscometer :Rotational viscometer for fast determination of viscosity as specified in ISO 2555.Should be compatible with Brookfield method with auto ranging display	1	2,76,045
Spectrophotometer : with spectro plasma generator and read out display /argon saving module/High resolution CCD with detectors and multi-optical system and calibration modules	1	86,21,795
Thermo-gravimetric Analyzer/DSC 8000 : Differential Scanning Calorimetry (DSC) operation with robotic advanced auto sampling solution combining precision, accuracy speed and unattended operation with 3 axis loading /unloading facilities	1	43,98,762
Vibration tests: with 1000kgf force 100 g /frequency range up to 2500 Hz	1	39,42,630
Electrical safety testing system with Electrical safety equipment such as 270V ,20A AC power supply, Electronic DC Load module, DC power supply, Thermal imager, soldering station	1	28,09,621

<b>Equipment with Specification</b>	<b>Quantity</b>	<b>Amount (In Rs.)</b>
Visual Metrology system for electronic component and assembly with closed loop servo system/metrology B&W cameras/programmable LED back light and VMS metrology software	1	80,58,563
LED Testing System: Accelerated aging and life test system meeting requirements of IEC 62717 including adjustable and constant chamber and photometry /colourimetry and electrical analysis facilities	1	54,06,342
<b>Total-E (Environmental Test &amp; Certification)</b>		<b>13,12,80,072</b>