Application for Booking the Services of C-CAT Centre, CEMILAC

1.	Name of the Organization	
2.	Name of Contact Person	
3.	Address and Telephone Number and E -mail id of the Contract Person & Organisation	
4.	Name & Designation of People that Require Entry to C-CAT	
5.	Name of the Project	
6.	Type of Analysis	
7.	Tool Required (Optional) If this is not mentioned, available tool suitable for activities mentioned in para 6 will be allocated by the centre	
8.	Duration (No. of Days) for Which the Booking is Required	
9.	RCMA/CEMILAC Person Involved in the Airworthiness Certification of the Item/LRU/System	
10.	Confirmation Availability of all the Pre-requisite Information as per Annexure 1	Yes /No
11.	Prior Security Approval for Company Personnel to work in CEMILAC Premises has been obtained or not? If yes provide the Reference Number of Security Clearance Letter	Yes /No Ref:

Undertaking by the Applicant

I, hereby undertake that the usage of C-CAT Centre for the Complex Electronics Hardware/Firmware Verification & Validation is for the end use of the above Project only and if I get the permission from Chief Executive (A), CEMILAC to use the facilities at CEMILAC premises, my team will abide by all the rules and regulations and security instructions of CEMILAC.

I also declare that I take the full responsibility of the Analysis Results and indemnify CEMILAC and its personnel from any legal consequences arising from the above work.

Signature of Applicant

Date: Name and Designation

For Office Use Only

Recommended / Not Recommended   Security & Vigilance

RD/GD/Director   GD (MS)

Time Slot Available .... to ....

Technology Director (C-CAT)

Approval by Chief Executive (A), CEMILAC

Approved / Not Approved

Chief Executive (A), CEMILAC

Pre-requisite Technical Information Essential for Complex Electronics Hardware (CEH) Verification & Validation

Purpose	Tool name	Vendor	Ver no.	Pre-requisite
Requirement Analysis, Traceability to Test document	Req Tracer	Mentor Graphics	2022.3	As Per Appendix A or HRD, FRD, HTD (in .doc file format)
Code Simulation & Debugging	Questa Sim	Mentor Graphics	2022.3	Source Code
Code Coverage	Questa Sim	Mentor Graphics	2022.3	Source Code
Linting Analysis, Auto Check Compliance with DO-254 Standard	Q-Verify	Mentor Graphics	2022.3	Source Code
Cover Check	Q-Verify	Mentor Graphics	2022.3	Source Code & Test Bench
CDC Analysis	Q-Verify	Mentor Graphics	2022.3	Source Code & Test Bench
Design & Validation of Module	Vivado	Xilinx	2022.2	Source code & Target Hardware

A. <u>Preliminary Data</u>

    a) System Safety Assessment (SSA)

    b) Plan for Hardware Aspects of Certification (PHAC)

    c) Function Requirement Specification (FRS)

B. <u>Hardware Design Data</u>

    a) Hardware Requirements Document (HRD)

    b) Hardware Design Representation Data (HDRD)

    c) Conceptual Design Data (CDD)

    d) Detailed Design Document (DDD)

    e) Hardware/Software Interface Data (IRD)

C. <u>Verification & Validation Data</u>

    a) Hardware Traceability Data (HTD)

    b) Hardware Review & Analysis Procedure (HRAP)

    c) Hardware Test Procedure (HTP)

<u>CEH Certification-Stages of Involvement (SOI)</u>

<u>SOI-1: Hardware Plans</u>

    a) Plan for Hardware Aspects of Certification (PHAC)

    b) Hardware Design Plan (HDP)

    c) Hardware Verification & Validation Plan (HVVP)

    d) Hardware Configuration Management Plan (HCMP)

    e) Hardware Process Assurance Plan (HPAP)

    f) Hardware Design Standards (HDS)

    g) Hardware Requirement Standards (HRS)

    h) Hardware Coding Standard (HCS)

    i) Hardware Verification and Validation Standard (HVVS)

    j) Hardware Archive standards (HAS)

SOI-2: Hardware Design Data

a) Hardware Requirements (HRD)
b) Hardware Design Representation data(HDRD)
c) Conceptual Design Data (CDD)
d) Detailed Design Data (DDD)
e) Top-Level Drawing
f) Assembly Level Drawing
g) Installation Control Drawings
h) Hardware/Software Interface Data (IRD)
i) Tool Assessment Qualification Data (TAQD)

SOI-3: Verification & Validation Data

a) Hardware Traceability Data(HTD)
b) Hardware Review and analysis procedures(HRAP)
c) Hardware review and Analysis results(HRAR)
d) Hardware Test Procedures (HTP)
e) Hardware Test results (HTR)
f) Hardware Acceptance Test Criteria (HATC)
g) Tool Assessment and Qualification Data (TAQD)

SOI:4 Certification

a) Hardware configuration Management Records (HCMR)
b) Hardware Accomplishment Summary (HAS)
c) Hardware Environmental Configuration Index (HECI)
d) Hardware Process Assurance records(HPAR)
e) Hardware Configuration Index (HCI)