A REPORT

ON

INDUSTRIAL VISIT

2018

APOLLO MICRO SYSTEMS HYDERABAD

Date of visit: 6/10/2018

REPORT ON INDUSTRIAL VISIT TO APOLLO MICRO SYSTEMS HYDERABAD

The department of Electronics and Communication Engineering, CMR Engineering College, organized one day Industrial visit to **APOLLO MICRO SYSTEMS** on 6th October 2018 for fourth year B.Tech ECE students. The visit was organized with the prior permission and guidance of Hon. Principal Dr.A.Srinivasula Reddy and HOD of ECE Department Prof. D.Bhasker, Assistant professors of ECE department T. Satyanarayana, L.Srinivas and O.Lakshmi kusuma accompanied students for this industrial visit.

Total 54 students of fourth year B.Tech (ECE) along with Four faculty members have joined this industrial visit. The team was accompanied by from Mr. Y Venkateswara Rao, (Technical manager) who provided various insights regarding the different stages of product design and development .

The students had the opportunity of visiting the following sections of the Company

- Mechanical Housing Design
- Temperature chambers
- PCB mounting (manual and machine)
- Hardware system Design
- Software System Design
- Testing Division
- Cable Harnessing

The details of journey are as follows:-

1. We started traveling from CMR Engineering college at 09.45 AM on 6th October 2018.
2. We reached AMS, Hyderabad at 11.00 A M.
3. After visiting the company we started back at 3.30 P M.
4. We arrived at 5.00 P.M. at CMREC Campus,

DEPARTMENT OF ECE, CMREC

Apollo Micro Systems Ltd Popularly known as "AMS" is incorporated in 1985

AMS has grown from a small PCB design Company to a strong design, development and production of mission critical and safety critical systems required in Defence, Aerospace and Space .Today AMS is able to offer turnkey custom built subsystems, complex on board and ground based electronics / embedded systems (includes Hardware, Software and Mechanical Designing) Fully equipped with state of the art in house Electronics Manufacturing Facilities and Mechanical precision machining facilities to cater large production requirements (60, 000 Sq.ft)

Our tour was started with Excitement & Enthusiasm.

As we reached there, Mr. K.Sai Nikith welcomed us at AMS. We entered the industry and after a small introduction and overview of company operational setup we entered the Test Facilities Setup. The Expert explained the actual working of each system. He explained how the Testing of the equipment is done based on the project requirements.

.

BGA X-RAY MACHINE

HOT AND COLD CHAMBER

AUTOMATED OPTICAL INSPECTION SYSTEM

After explaining the test facilities Mr. sai nikith and his team explained about mechanical housing design and why anodized or chromatitised coating is given to th structures to protect internal circuitary.

PCB Assembly Facilities:

All the students moved to the PCB Assembly Division along with faculties. In this division various advanced equipment were observed for populating the PCBs for machine

soldering the SMD(surface mount devices) components, BGA (ball grid array) ICs and all other components on the PCB along with the others ICs and components

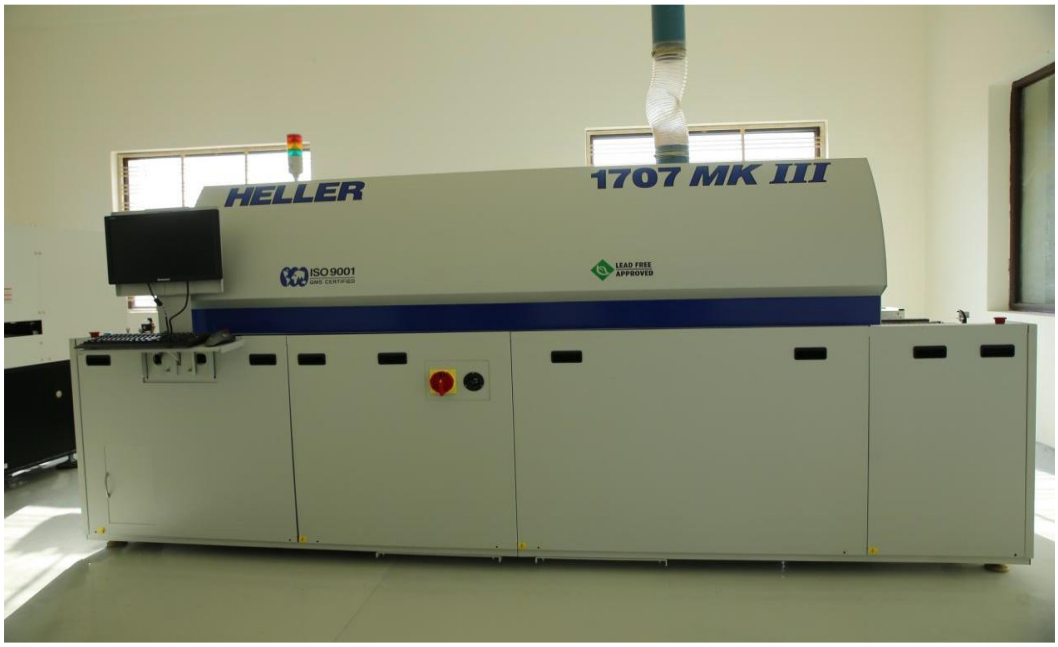

Fig. SMT Reflow soldering ovens

.

Apart from machine soldering the company staff also disclosed various methods encountered in manual soldering of the components.

Analog Design and Testing division:

The students then visited the Design and testing division of AMS.The AMS staff explained about the software adopted in design of the products according to their requirements and ensuring the working of the product with various testing phases.

The ams involved in design of various systems like aerospace, defense, naval,ground and avionics systems

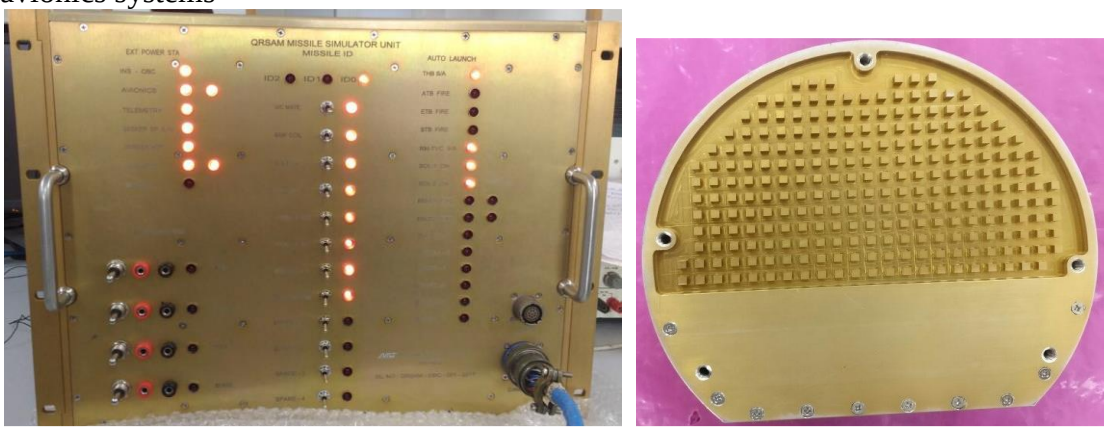

Fig. some of the products of AMS

Students also has visited have visited the cable harnessing section at the end. They got an idea on how a product is designed and developed from end to end by visiting the company. And they have also introduced many state of the art technologies used in the market.

Our Experience of Industrial Visit

Visit seems to be very informative and gives good learning experience. After completing the industrial visit, we have upgraded our knowledge at a very great level. It was a good learning experience. In each & every lab, students got some or the other new ideas and new thinking which was very necessary. All the staff members and students are extremely thankful to honorable principal Dr.A.Srinivasula Reddy and officials at AMS company who granted the permission for visiting their organization and guide the students.