

Circuit Imaging Operator

Aliases: Photo Imaging Operator

Industry/Sector(s): Electronics and HW

JOB DESCRIPTION ¹

The tasks a Circuit Imaging Operator is expected to perform include:

- Placing the laminated board on the circuit imaging machine while taking due care in alignment of the holes drilled on the board
- Placing the UV translucent film on the laminated board
- Operating the machine to expose the photo resist to UV light
- Recognising basic faults in the circuit imaging machine and correcting them
- Undergoing maintenance of the circuit imaging machine from time to time

WORK ENVIRONMENT ^{1, 2}

- It requires physical activity
- Need not handle a team
- Local travelling may be a part of this job profile
- Part-time work and contractual jobs are available
- Work from home option is not available

Working hours

- Organizations usually work for 5/6 days a week for 8/9 hours everyday. This may vary from organization to organization
- Shift system may be available
- Overtime may be required

Is the job suitable for a candidate with special needs?

This may vary from organization to organization

EDUCATIONAL QUALIFICATIONS AND TRAINING ¹

- Preferably, 10th
- Certified training for Circuit Imaging Operator (programme aligned to ELE/Q2201 released by Electronics Sector Skills Development Council)

KEY COMPETENCIES ¹

- Thorough knowledge of the circuit imaging machine functioning
- Knowledge of UV, photo resist, intensity, vacuum, alignment and their importance in the circuit imaging process
- Familiarity with operation and maintenance of machines such as laminator, imaging and developing machines
- Knowledge of photo tools, development of the UV cured circuit, understanding of development parameters, knowledge of chemicals used for developing, etc.
- Knowledge of the complete process of circuit imaging room including surface preparation of laminate, lamination of the board and cooling, circuit exposure and cooling and developing the exposed board
- Knowledge of manual and automated exposure machines and standard process
- Familiarity with circuit imaging process including surface preparation, lamination, exposure, cooling and developing
- Knowledge of Dry Film Resist (DFR) lamination and DFR developer operations including process parameters, chemicals, calibration, exposure time, etc.
- Knowledge of various methods of imaging
- Knowledge of IPC standards and criteria for printed circuit boards
- Knowledge of environment and safety norms
- Knowledge and understanding of common defects and remedies with cause

DESIRABLE COMPETENCIES ¹

- Planning and organizing skills
- Team player
- Attention to detail

AVAILABLE SKILL TRAINING AND LEARNING INSTITUTES

Schools across India

AVAILABLE SKILL TRAINING SCHEMES/SCHOLARSHIPS

For scholarship and schemes, use further links like:

- <https://scholarships.gov.in/>

SAMPLE OF TRAINING AND LEARNING COURSES

For further guidance, contact your nearest Common Service Centre or Contact NCS Call Centre (Toll Free Number: 1800-425-1514)

CAREER PROGRESSION PATH ⁴

Helper → **Circuit Imaging Operator** → Production Supervisor/Process Engineer – Imaging → Production Manager

The progression is indicative

EXPECTED EARNINGS ³

- For new entrants - Rs 11,000 to Rs 12,000 per month

These figures are indicative and subject to change

REQUIRED WORK EXPERIENCE ¹

Some organizations hire new entrants too

PROBABLE EMPLOYERS ³

- Integrated circuit design
- PCB manufacturers
- Electronics manufacturers

KEYWORDS

- Photo Imaging
- PCB Imaging

OCCUPATIONAL CODES AND STANDARDS

Standard	Code	Description
NCO 2015	7321.0802	Circuit Imaging Operator
ISCO 2008	7321	Pre-press Technicians
NIC 2008	26103	Manufacture of integrated circuits (analogue, digital or hybrid)
QP Reference	ELE/Q2201	Circuit Imaging Operator
NSQF	Level 4	Not available

REFERENCES

1	http://www.nsdcindia.org/sites/default/files/files/Circuit-Imaging-Operator.pdf
2	http://www.ccdisabilities.nic.in/page.php?s=reg&t=def&p=list_jobsNew
3	http://www.indeed.co.in/cmp/Ahker-Engineering-Company/jobs/Recruitment-Machine-Operator-9a93fa77378c7fa9?q=Machine+Operators
4	http://dget.nic.in/upload/uploadfiles/files/publication/Des-Div-7.pdf